

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: P332574-840

Luminaire Tested: **S124DIP-S575D1205U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332574-840
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-S575D1205U840-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 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: 7249.6 lumens
Efficiency: N/A
Efficacy: 146.8 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

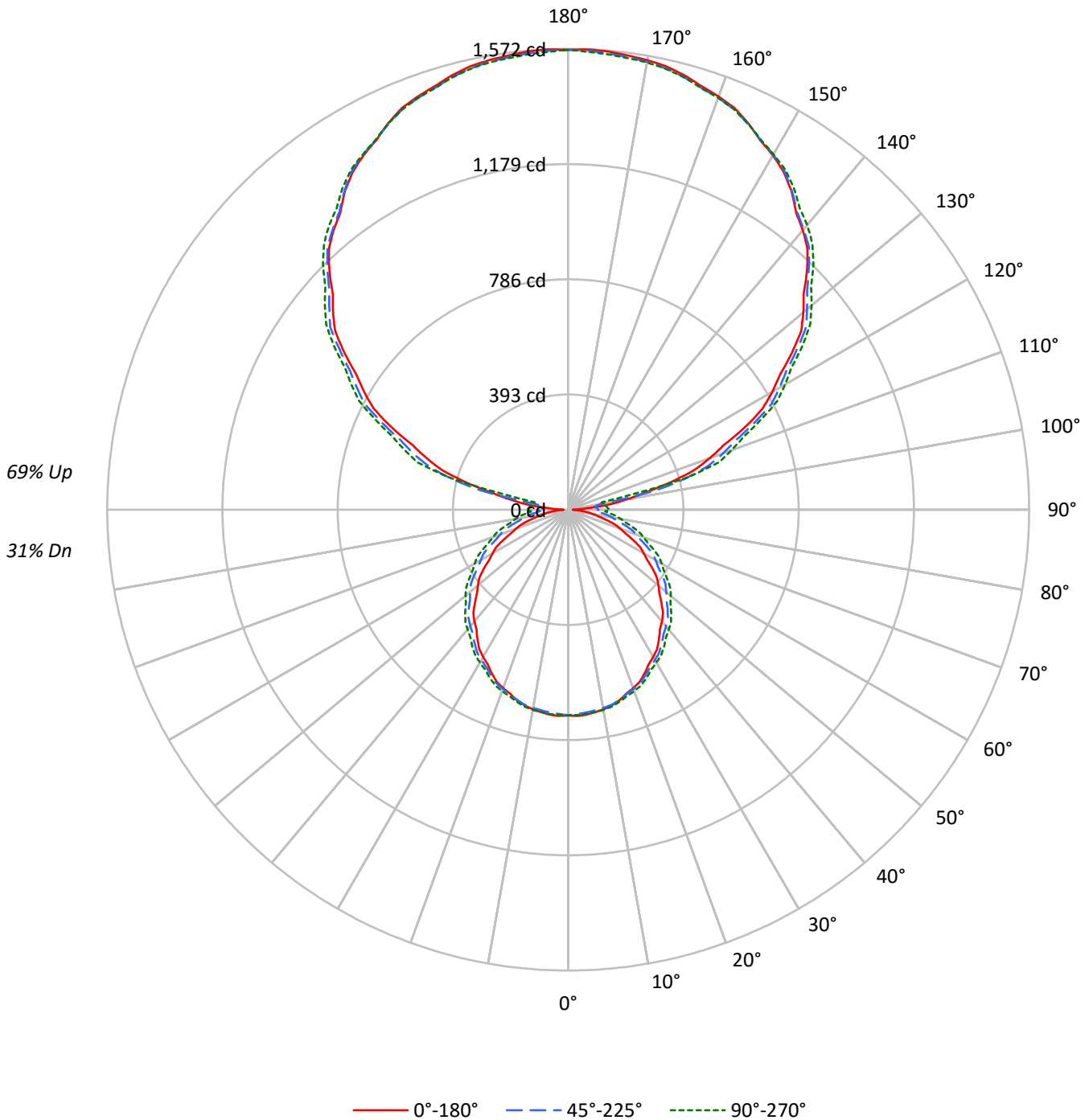
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332574-840

CATALOG NUMBER: S124DIP-S575D1205U840-4F0-1E-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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31	24
2	84	77	71	65	75	69	64	59	54	51	47	41	38	36	28	27	26	20
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	17
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18	14
5	64	52	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16	12
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14	11
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12	9
8	50	38	30	25	45	34	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10	7
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5666	5666	5666
5°	5683	5537	5552
10°	5649	5446	5442
15°	5598	5341	5312
20°	5521	5226	5185
25°	5435	5096	5047
30°	5342	4967	4904
35°	5237	4834	4779
40°	5153	4710	4648
45°	5027	4594	4537
50°	4920	4460	4418
55°	4811	4333	4278
60°	4641	4173	4153
65°	4454	4001	3997
70°	4226	3805	3816
75°	3910	3587	3652
80°	3559	3381	3492
85°	3112	3195	3398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	0.9
10°-20°	190.4	2.6
20°-30°	287.9	4.0
30°-40°	348.3	4.8
40°-50°	368.3	5.1
50°-60°	346.6	4.8
60°-70°	287.5	4.0
70°-80°	202.0	2.8
80°-90°	118.7	1.6
90°-100°	121.5	1.7
100°-110°	392.3	5.4
110°-120°	688.2	9.5
120°-130°	849.8	11.7
130°-140°	897.1	12.4
140°-150°	832.9	11.5
150°-160°	670.4	9.2
160°-170°	432.4	6.0
170°-180°	149.0	2.1
0°-30°	544.7	7.5
0°-40°	893.1	12.3
0°-60°	1607.9	22.2
0°-90°	2216.1	30.6
90°-120°	1201.9	16.6
90°-150°	3781.8	52.2
90°-180°	5034.0	69.4
0°-180°	7249.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	703	700	695	700	700	67
15°	674	674	672	678	678	190
25°	616	621	623	631	633	284
35°	539	548	556	567	570	337
45°	450	464	479	492	497	347
55°	352	369	392	407	412	314
65°	244	269	296	314	321	241
75°	135	164	197	218	226	144
85°	42	75	110	133	142	44
90°	16	60	104	132	142	11
95°	75	63	94	121	131	91
105°	360	384	418	444	412	378
115°	664	676	699	718	724	654
125°	930	935	951	969	976	830
135°	1152	1151	1160	1175	1183	887
145°	1327	1329	1330	1335	1341	829
155°	1454	1455	1452	1456	1453	670
165°	1534	1528	1528	1536	1527	433
175°	1569	1562	1563	1572	1559	149
180°	1569	1569	1569	1569	1569	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8
2.5°	704.3	703.9	703.5	703.0	702.6	701.9	700.7	699.6	698.4	697.3	698.3
5°	702.6	702.1	701.5	700.9	700.4	699.5	698.3	697.1	695.9	694.7	696.1
7.5°	696.6	696.2	695.9	695.6	695.3	694.7	693.7	692.7	691.6	690.5	692.2
10°	691.6	691.4	691.2	691.1	690.8	690.3	689.4	688.5	687.7	686.8	688.4
12.5°	684.6	684.6	684.6	684.5	684.5	684.2	683.6	683.0	682.4	681.8	683.2
15°	673.5	673.7	673.8	674.0	674.2	674.0	673.5	673.0	672.4	671.9	673.5
17.5°	658.2	658.7	659.2	659.7	660.4	660.6	660.5	660.4	660.2	660.1	661.7
20°	647.5	648.0	648.5	649.1	649.6	649.9	650.2	650.4	650.5	650.7	652.4
22.5°	635.6	636.2	636.9	637.5	638.2	638.7	639.0	639.3	639.6	640.0	641.8
25°	616.1	617.1	618.2	619.2	620.3	621.1	621.6	622.1	622.7	623.2	625.1
27.5°	594.4	595.9	597.4	599.1	600.6	601.7	602.5	603.3	604.1	604.9	606.7
30°	580.0	581.4	582.7	584.1	585.5	586.8	588.0	589.3	590.5	591.8	593.7
32.5°	564.2	565.9	567.5	569.3	571.0	572.5	573.8	575.2	576.5	577.9	580.1
35°	539.1	541.2	543.3	545.3	547.4	549.4	551.1	552.9	554.6	556.3	558.9
37.5°	513.8	516.1	518.6	521.0	523.4	525.7	527.9	530.1	532.2	534.3	536.8
40°	497.5	499.7	502.0	504.2	506.5	508.9	511.3	513.7	516.2	518.7	521.3
42.5°	478.6	481.1	483.6	486.3	488.8	491.5	494.3	497.2	500.1	502.9	505.8
45°	449.5	452.8	456.2	459.5	462.7	466.1	469.4	472.7	476.1	479.4	482.3
47.5°	421.7	425.1	428.5	431.9	435.4	439.0	442.8	446.7	450.5	454.3	457.5
50°	401.5	405.4	409.2	413.1	417.0	420.8	424.6	428.5	432.3	436.2	439.6
52.5°	381.4	385.3	389.1	392.9	396.8	400.9	405.4	409.7	414.1	418.5	422.0
55°	352.0	355.7	359.4	363.0	366.7	371.1	376.4	381.6	386.9	392.1	395.7
57.5°	319.2	323.8	328.3	332.9	337.4	342.2	347.4	352.6	357.9	363.0	367.2
60°	297.8	302.4	306.9	311.4	316.0	321.1	326.9	332.6	338.4	344.2	348.2
62.5°	277.1	282.1	287.0	292.0	296.9	302.3	308.0	313.8	319.6	325.4	329.3
65°	243.6	249.2	254.8	260.3	266.0	271.8	277.6	283.6	289.5	295.5	299.8
67.5°	211.4	217.3	223.3	229.2	235.1	241.3	247.6	254.0	260.3	266.7	271.1
70°	189.3	195.3	201.3	207.2	213.2	219.4	226.0	232.7	239.3	246.0	250.6
72.5°	168.0	174.1	180.2	186.2	192.3	198.8	205.9	213.0	220.0	227.1	231.7
75°	135.1	141.6	148.0	154.5	161.0	167.9	175.2	182.6	190.0	197.2	202.2
77.5°	104.5	111.4	118.3	125.0	131.9	139.2	146.8	154.5	162.2	169.9	174.8
80°	85.6	92.6	99.7	106.6	113.6	120.9	128.7	136.3	144.0	151.7	156.9
82.5°	66.8	74.0	81.3	88.6	95.8	103.3	111.0	118.7	126.3	134.1	139.5
85°	41.6	49.0	56.4	63.6	71.0	78.6	86.4	94.3	102.2	110.0	115.2
87.5°	23.9	31.7	39.4	47.1	54.7	62.6	70.7	78.8	86.8	94.9	100.3
90°	16.1	26.0	35.9	45.6	55.5	65.2	74.8	84.4	94.0	103.6	110.3
92.5°	26.8	33.1	39.6	46.0	52.5	60.5	70.1	79.7	89.3	98.9	105.4
95°	74.7	71.7	68.6	65.4	62.3	64.5	71.9	79.4	86.7	94.2	100.5
97.5°	146.3	156.8	167.3	177.8	188.2	182.5	160.5	138.5	116.4	94.5	99.2
100°	201.1	210.4	219.5	228.8	238.0	228.0	198.8	169.7	140.6	111.4	111.6
102.5°	263.1	270.4	277.9	285.3	292.8	297.4	299.4	301.3	303.4	305.4	262.1
105°	360.3	365.4	370.4	375.5	380.5	386.9	394.7	402.4	410.2	418.0	424.6
107.5°	451.9	455.6	459.2	462.8	466.5	472.2	480.1	488.0	495.8	503.7	509.2
110°	513.2	516.4	519.7	522.9	526.1	531.6	539.3	546.9	554.6	562.3	566.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	572.7	576.2	579.8	583.4	586.9	592.0	598.5	605.1	611.7	618.2	622.1
115°	664.2	666.5	668.8	671.3	673.6	677.4	682.8	688.1	693.4	698.7	703.1
117.5°	747.3	749.3	751.3	753.3	755.3	759.1	765.0	770.7	776.5	782.2	785.8
120°	803.0	804.6	806.2	807.7	809.3	812.4	817.3	822.1	826.9	831.7	835.7
122.5°	855.6	856.4	857.1	857.8	858.5	861.4	866.6	871.7	876.9	882.0	885.9
125°	930.2	931.0	931.9	932.7	933.6	935.9	939.8	943.6	947.5	951.4	955.4
127.5°	1001.3	1001.4	1001.5	1001.6	1001.7	1004.0	1008.6	1013.1	1017.6	1022.2	1025.2
130°	1046.7	1046.8	1046.8	1046.9	1047.0	1048.8	1052.5	1056.0	1059.7	1063.2	1066.6
132.5°	1088.9	1089.2	1089.5	1089.8	1090.1	1091.9	1095.1	1098.3	1101.6	1104.8	1108.0
135°	1151.5	1151.2	1151.0	1150.7	1150.4	1151.4	1153.8	1156.0	1158.3	1160.5	1163.9
137.5°	1207.6	1207.5	1207.5	1207.4	1207.3	1208.2	1209.9	1211.6	1213.4	1215.2	1218.2
140°	1244.3	1244.6	1245.0	1245.3	1245.6	1246.2	1246.8	1247.5	1248.2	1248.9	1251.9
142.5°	1276.5	1277.4	1278.3	1279.2	1280.1	1280.6	1280.8	1281.0	1281.2	1281.4	1284.0
145°	1326.8	1327.4	1328.0	1328.6	1329.2	1329.5	1329.5	1329.5	1329.5	1329.5	1330.8
147.5°	1366.9	1368.2	1369.5	1370.7	1372.0	1372.5	1372.3	1372.0	1371.7	1371.5	1371.8
150°	1395.9	1396.8	1397.8	1398.6	1399.5	1399.8	1399.5	1399.3	1399.0	1398.7	1398.7
152.5°	1419.8	1420.6	1421.4	1422.2	1423.0	1423.1	1422.7	1422.2	1421.7	1421.3	1421.7
155°	1453.9	1454.1	1454.4	1454.6	1454.9	1454.6	1453.9	1453.1	1452.3	1451.5	1452.6
157.5°	1482.7	1482.6	1482.4	1482.3	1482.1	1481.6	1480.7	1479.9	1478.9	1478.0	1479.4
160°	1499.6	1498.8	1498.0	1497.3	1496.5	1496.0	1495.7	1495.4	1495.2	1494.9	1496.5
162.5°	1514.6	1513.7	1512.7	1511.7	1510.7	1510.1	1509.7	1509.5	1509.2	1509.0	1510.6
165°	1533.7	1532.4	1531.1	1529.7	1528.4	1527.8	1527.8	1527.8	1527.8	1527.8	1529.8
167.5°	1548.6	1547.3	1546.0	1544.6	1543.3	1542.5	1542.4	1542.2	1542.1	1541.9	1544.2
170°	1557.1	1555.6	1554.0	1552.5	1550.8	1550.2	1550.4	1550.7	1551.0	1551.3	1553.4
172.5°	1562.8	1561.2	1559.6	1558.0	1556.5	1555.8	1556.1	1556.4	1556.6	1556.9	1558.9
175°	1568.8	1567.3	1565.7	1564.2	1562.6	1562.0	1562.2	1562.5	1562.8	1563.0	1565.3
177.5°	1571.7	1570.2	1568.7	1567.3	1565.8	1565.3	1565.7	1566.1	1566.6	1567.0	1568.6
180°	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8
2.5°	699.3	700.2	701.3	701.7	701.6	701.4	701.3	701.1
5°	697.5	698.8	700.2	700.8	700.7	700.5	700.3	700.1
7.5°	693.8	695.3	696.9	697.6	697.4	697.2	697.0	696.9
10°	689.9	691.6	693.1	693.8	693.7	693.5	693.3	693.1
12.5°	684.7	686.1	687.5	688.2	688.2	688.1	688.1	688.1
15°	675.0	676.6	678.1	678.8	678.7	678.5	678.3	678.1
17.5°	663.3	664.9	666.5	667.2	667.1	667.0	666.8	666.7
20°	654.2	655.9	657.6	658.5	658.5	658.5	658.5	658.5
22.5°	643.5	645.2	646.9	648.0	648.2	648.5	648.8	649.1
25°	627.0	628.9	630.9	631.9	632.1	632.3	632.4	632.6
27.5°	608.5	610.3	612.1	613.1	613.3	613.5	613.7	613.9
30°	595.6	597.5	599.5	600.6	600.9	601.3	601.6	602.0
32.5°	582.3	584.5	586.7	587.9	588.3	588.7	589.1	589.4
35°	561.3	563.7	566.1	567.6	568.2	568.7	569.2	569.8
37.5°	539.4	541.8	544.3	545.8	546.3	546.9	547.4	548.1
40°	523.9	526.5	529.2	530.8	531.5	532.2	532.9	533.6
42.5°	508.8	511.6	514.5	516.2	516.8	517.4	518.0	518.5
45°	485.3	488.3	491.2	493.1	494.0	494.9	495.7	496.7
47.5°	460.5	463.6	466.7	468.7	469.8	470.8	471.9	472.9
50°	443.1	446.7	450.1	452.4	453.4	454.4	455.6	456.6
52.5°	425.6	429.0	432.5	434.7	435.9	436.9	437.9	439.0
55°	399.1	402.6	406.1	408.4	409.4	410.5	411.5	412.5
57.5°	371.3	375.6	379.7	382.2	383.2	384.2	385.2	386.2
60°	352.2	356.3	360.2	362.9	364.4	365.8	367.2	368.6
62.5°	333.4	337.4	341.4	344.1	345.5	346.9	348.3	349.7
65°	304.2	308.6	313.0	315.8	317.2	318.6	320.0	321.4
67.5°	275.6	280.0	284.5	287.3	288.7	290.0	291.4	292.8
70°	255.4	260.1	264.8	267.8	269.0	270.2	271.5	272.7
72.5°	236.2	240.9	245.4	248.3	249.7	251.1	252.5	253.8
75°	207.0	211.9	216.8	220.0	221.6	223.2	224.8	226.3
77.5°	179.9	184.8	189.8	193.1	194.7	196.4	198.0	199.8
80°	162.2	167.3	172.6	175.9	177.3	178.7	180.2	181.6
82.5°	144.8	150.2	155.6	159.1	160.6	162.1	163.6	165.2
85°	120.5	125.7	131.0	134.5	136.2	137.9	139.7	141.5
87.5°	105.6	111.1	116.4	120.0	121.6	123.2	124.8	126.5
90°	116.8	123.5	130.2	134.4	136.3	138.3	140.2	142.1
92.5°	111.9	118.4	124.8	128.9	130.4	131.9	133.4	134.8
95°	106.7	113.0	119.3	123.4	125.2	127.0	128.9	130.7
97.5°	103.9	108.7	113.4	116.6	118.5	120.2	121.9	123.7
100°	111.9	112.2	112.5	113.4	114.8	116.3	117.9	119.3
102.5°	218.8	175.6	132.4	111.4	112.8	114.2	115.6	117.0
105°	431.4	438.1	444.8	444.1	436.2	428.2	420.2	412.2
107.5°	514.6	520.1	525.5	529.4	531.6	533.9	536.1	538.4
110°	571.4	575.9	580.5	583.8	585.9	588.1	590.4	592.5



TEST NUMBER: P332574-840

CATALOG NUMBER: S124DIP-S575D1205U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	625.8	629.5	633.4	636.4	638.8	641.2	643.6	646.0
115°	707.5	711.9	716.2	719.0	720.2	721.4	722.7	723.9
117.5°	789.3	792.8	796.4	798.8	800.1	801.3	802.6	804.0
120°	839.7	843.7	847.8	850.2	851.1	851.9	852.8	853.7
122.5°	889.7	893.4	897.3	899.6	900.3	901.0	901.7	902.5
125°	959.6	963.6	967.8	970.5	971.8	973.1	974.4	975.7
127.5°	1028.1	1031.2	1034.1	1036.1	1037.1	1038.0	1039.1	1040.1
130°	1070.0	1073.4	1076.8	1079.0	1080.1	1081.2	1082.2	1083.2
132.5°	1111.4	1114.6	1117.8	1119.9	1120.7	1121.6	1122.4	1123.3
135°	1167.2	1170.5	1173.8	1176.3	1177.8	1179.4	1180.9	1182.6
137.5°	1221.3	1224.5	1227.6	1229.5	1230.2	1230.9	1231.7	1232.4
140°	1255.1	1258.1	1261.1	1263.2	1264.4	1265.5	1266.6	1267.8
142.5°	1286.6	1289.1	1291.7	1293.3	1294.1	1294.9	1295.8	1296.6
145°	1332.1	1333.4	1334.7	1336.0	1337.2	1338.4	1339.7	1340.9
147.5°	1372.2	1372.5	1372.9	1373.4	1374.3	1375.1	1375.9	1376.7
150°	1398.7	1398.7	1398.7	1398.9	1399.1	1399.4	1399.7	1399.9
152.5°	1422.1	1422.5	1422.9	1423.0	1422.9	1422.7	1422.6	1422.4
155°	1453.6	1454.6	1455.7	1455.8	1455.0	1454.2	1453.5	1452.7
157.5°	1480.8	1482.1	1483.5	1483.5	1482.1	1480.8	1479.4	1478.0
160°	1498.0	1499.6	1501.2	1501.2	1499.6	1498.0	1496.5	1494.9
162.5°	1512.2	1513.7	1515.3	1515.2	1513.4	1511.7	1509.8	1508.0
165°	1532.0	1534.1	1536.1	1536.0	1533.7	1531.3	1528.9	1526.6
167.5°	1546.5	1548.7	1551.1	1550.8	1548.3	1545.7	1543.1	1540.4
170°	1555.4	1557.5	1559.6	1559.3	1556.7	1554.1	1551.6	1548.9
172.5°	1561.0	1563.2	1565.2	1564.9	1562.1	1559.2	1556.4	1553.6
175°	1567.7	1570.0	1572.4	1572.0	1568.8	1565.7	1562.6	1559.4
177.5°	1570.3	1572.0	1573.7	1573.3	1570.7	1568.2	1565.7	1563.3
180°	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8	1568.8

(END OF REPORT)