

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

Luminaire Tested: **S124DIP-S575D1205U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332574
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-S575D1205U835-4F0-1E-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: 7178.8 lumens
Efficiency: N/A
Efficacy: 145.3 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

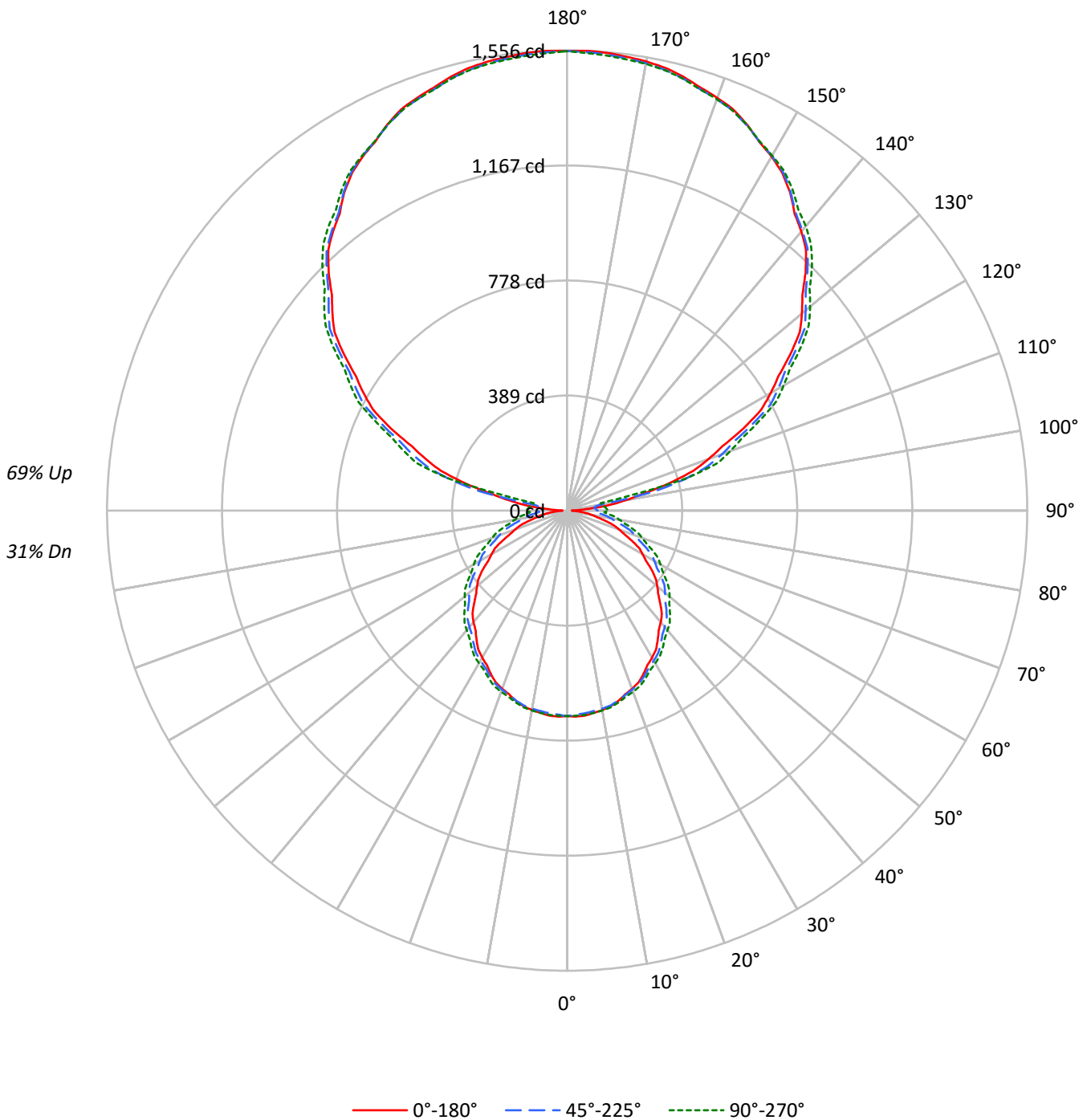
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: S124DIP-S575D1205U835-4F0-1E-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°	5610	5610	5610
5°	5628	5483	5498
10°	5593	5393	5388
15°	5543	5289	5260
20°	5467	5175	5135
25°	5382	5046	4997
30°	5290	4919	4856
35°	5185	4787	4732
40°	5102	4663	4603
45°	4978	4549	4492
50°	4873	4416	4375
55°	4765	4291	4237
60°	4596	4132	4112
65°	4410	3962	3958
70°	4186	3768	3778
75°	3872	3553	3616
80°	3526	3347	3457
85°	3082	3163	3364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	0.9
10°-20°	188.5	2.6
20°-30°	285.1	4.0
30°-40°	344.9	4.8
40°-50°	364.7	5.1
50°-60°	343.2	4.8
60°-70°	284.7	4.0
70°-80°	200.0	2.8
80°-90°	117.6	1.6
90°-100°	120.3	1.7
100°-110°	388.5	5.4
110°-120°	681.4	9.5
120°-130°	841.5	11.7
130°-140°	888.4	12.4
140°-150°	824.8	11.5
150°-160°	663.8	9.2
160°-170°	428.1	6.0
170°-180°	147.6	2.1
0°-30°	539.4	7.5
0°-40°	884.4	12.3
0°-60°	1592.2	22.2
0°-90°	2194.5	30.6
90°-120°	1190.2	16.6
90°-150°	3744.8	52.2
90°-180°	4984.0	69.4
0°-180°	7178.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	693	688	694	693	66
15°	667	668	665	672	672	188
25°	610	615	617	625	626	281
35°	534	543	551	561	564	334
45°	445	460	475	487	492	344
55°	349	365	388	403	408	311
65°	241	266	293	311	318	239
75°	134	163	195	216	224	142
85°	41	74	109	131	140	44
90°	16	60	103	131	141	11
95°	74	63	93	120	129	90
105°	357	380	414	440	408	374
115°	658	669	692	711	717	647
125°	921	926	942	960	966	822
135°	1140	1140	1149	1164	1171	878
145°	1314	1316	1316	1322	1328	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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CATALOG NUMBER: S124DIP-S575D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	697.4	697.0	696.6	696.1	695.7	695.0	693.9	692.8	691.6	690.5	691.5
5°	695.7	695.2	694.6	694.1	693.6	692.7	691.5	690.3	689.1	687.9	689.3
7.5°	689.8	689.4	689.1	688.8	688.5	687.9	686.9	685.9	684.8	683.8	685.4
10°	684.8	684.6	684.4	684.3	684.1	683.6	682.7	681.8	681.0	680.1	681.7
12.5°	677.9	677.9	677.9	677.8	677.8	677.5	676.9	676.3	675.7	675.1	676.5
15°	666.9	667.1	667.2	667.4	667.6	667.4	666.9	666.4	665.8	665.3	666.9
17.5°	651.8	652.3	652.8	653.3	653.9	654.1	654.0	653.9	653.8	653.7	655.2
20°	641.2	641.7	642.2	642.8	643.3	643.6	643.8	644.0	644.1	644.3	646.0
22.5°	629.4	630.0	630.7	631.3	632.0	632.5	632.8	633.1	633.4	633.7	635.5
25°	610.1	611.1	612.2	613.2	614.2	615.0	615.5	616.0	616.6	617.1	619.0
27.5°	588.6	590.1	591.6	593.2	594.7	595.8	596.6	597.4	598.2	599.0	600.8
30°	574.3	575.7	577.0	578.4	579.8	581.1	582.3	583.5	584.7	586.0	587.9
32.5°	558.7	560.4	562.0	563.7	565.4	566.9	568.2	569.6	570.9	572.3	574.4
35°	533.8	535.9	538.0	540.0	542.1	544.0	545.7	547.5	549.2	550.9	553.4
37.5°	508.8	511.1	513.5	515.9	518.3	520.6	522.7	524.9	527.0	529.1	531.6
40°	492.6	494.8	497.1	499.3	501.6	503.9	506.3	508.7	511.2	513.6	516.2
42.5°	473.9	476.4	478.9	481.5	484.0	486.7	489.5	492.3	495.2	498.0	500.9
45°	445.1	448.4	451.7	455.0	458.2	461.5	464.8	468.1	471.4	474.7	477.6
47.5°	417.6	420.9	424.3	427.7	431.1	434.7	438.5	442.3	446.1	449.9	453.0
50°	397.6	401.4	405.2	409.1	412.9	416.7	420.5	424.3	428.1	431.9	435.3
52.5°	377.7	381.5	385.3	389.1	392.9	397.0	401.4	405.7	410.1	414.4	417.9
55°	348.6	352.2	355.9	359.5	363.1	367.5	372.7	377.9	383.1	388.3	391.8
57.5°	316.1	320.6	325.1	329.6	334.1	338.9	344.0	349.2	354.4	359.5	363.6
60°	294.9	299.4	303.9	308.4	312.9	318.0	323.7	329.4	335.1	340.8	344.8
62.5°	274.4	279.3	284.2	289.1	294.0	299.3	305.0	310.7	316.5	322.2	326.1
65°	241.2	246.8	252.3	257.8	263.4	269.1	274.9	280.8	286.7	292.6	296.9
67.5°	209.3	215.2	221.1	227.0	232.8	238.9	245.2	251.5	257.8	264.1	268.5
70°	187.5	193.4	199.3	205.2	211.1	217.3	223.8	230.4	237.0	243.6	248.2
72.5°	166.4	172.4	178.4	184.4	190.4	196.9	203.9	210.9	217.9	224.9	229.4
75°	133.8	140.2	146.6	153.0	159.4	166.3	173.5	180.8	188.1	195.3	200.2
77.5°	103.5	110.3	117.1	123.8	130.6	137.8	145.4	153.0	160.6	168.2	173.1
80°	84.8	91.7	98.7	105.6	112.5	119.7	127.4	135.0	142.6	150.2	155.4
82.5°	66.1	73.3	80.5	87.7	94.9	102.3	109.9	117.5	125.1	132.8	138.1
85°	41.2	48.5	55.8	63.0	70.3	77.8	85.6	93.4	101.2	108.9	114.1
87.5°	23.7	31.4	39.0	46.6	54.2	62.0	70.0	78.0	86.0	94.0	99.3
90°	15.9	25.7	35.5	45.2	55.0	64.6	74.1	83.6	93.1	102.6	109.2
92.5°	26.5	32.8	39.2	45.6	52.0	59.9	69.4	78.9	88.4	97.9	104.4
95°	74.0	71.0	67.9	64.8	61.7	63.9	71.2	78.6	85.9	93.3	99.5
97.5°	144.9	155.3	165.7	176.1	186.4	180.7	158.9	137.1	115.3	93.6	98.2
100°	199.1	208.3	217.4	226.6	235.7	225.8	196.9	168.0	139.2	110.3	110.5
102.5°	260.5	267.8	275.2	282.5	289.9	294.5	296.5	298.4	300.4	302.4	259.5
105°	356.8	361.8	366.8	371.8	376.8	383.1	390.8	398.5	406.2	413.9	420.5
107.5°	447.5	451.1	454.7	458.3	461.9	467.6	475.4	483.2	491.0	498.8	504.2
110°	508.2	511.4	514.6	517.8	521.0	526.4	534.0	541.6	549.2	556.8	561.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	567.1	570.6	574.1	577.7	581.2	586.2	592.7	599.2	605.7	612.2	616.0
115°	657.7	660.0	662.3	664.7	667.0	670.8	676.1	681.4	686.6	691.9	696.2
117.5°	740.0	742.0	744.0	745.9	747.9	751.7	757.5	763.2	768.9	774.6	778.1
120°	795.2	796.7	798.3	799.8	801.4	804.5	809.3	814.1	818.8	823.6	827.5
122.5°	847.2	848.0	848.7	849.4	850.1	853.0	858.1	863.2	868.3	873.4	877.2
125°	921.1	921.9	922.8	923.6	924.5	926.8	930.6	934.4	938.2	942.1	946.1
127.5°	991.5	991.6	991.7	991.8	991.9	994.2	998.7	1003.2	1007.7	1012.2	1015.2
130°	1036.5	1036.6	1036.6	1036.7	1036.8	1038.6	1042.2	1045.7	1049.3	1052.8	1056.2
132.5°	1078.3	1078.6	1078.9	1079.2	1079.5	1081.2	1084.4	1087.6	1090.8	1094.0	1097.2
135°	1140.3	1140.0	1139.8	1139.5	1139.2	1140.2	1142.5	1144.7	1147.0	1149.2	1152.5
137.5°	1195.8	1195.7	1195.7	1195.6	1195.5	1196.4	1198.1	1199.8	1201.5	1203.3	1206.3
140°	1232.1	1232.4	1232.8	1233.1	1233.4	1234.0	1234.6	1235.3	1236.0	1236.7	1239.7
142.5°	1264.0	1264.9	1265.8	1266.7	1267.6	1268.1	1268.3	1268.5	1268.7	1268.9	1271.5
145°	1313.8	1314.4	1315.0	1315.6	1316.2	1316.5	1316.5	1316.5	1316.5	1316.5	1317.8
147.5°	1353.5	1354.8	1356.1	1357.3	1358.6	1359.1	1358.9	1358.6	1358.3	1358.1	1358.4
150°	1382.3	1383.2	1384.1	1384.9	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°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	692.5	693.4	694.4	694.8	694.7	694.5	694.4	694.3
5°	690.7	692.0	693.4	694.0	693.9	693.7	693.5	693.3
7.5°	687.0	688.5	690.1	690.8	690.6	690.4	690.2	690.1
10°	683.2	684.8	686.3	687.0	686.9	686.7	686.5	686.3
12.5°	678.0	679.4	680.8	681.5	681.5	681.4	681.4	681.4
15°	668.4	670.0	671.5	672.2	672.1	671.9	671.7	671.5
17.5°	656.8	658.4	660.0	660.7	660.6	660.5	660.3	660.2
20°	647.8	649.5	651.2	652.1	652.1	652.1	652.1	652.1
22.5°	637.2	638.9	640.6	641.7	641.9	642.2	642.5	642.8
25°	620.9	622.8	624.7	625.7	625.9	626.1	626.2	626.4
27.5°	602.6	604.3	606.1	607.1	607.3	607.5	607.7	607.9
30°	589.8	591.7	593.6	594.7	595.0	595.4	595.7	596.1
32.5°	576.6	578.8	581.0	582.2	582.6	582.9	583.3	583.6
35°	555.8	558.2	560.6	562.1	562.6	563.1	563.6	564.2
37.5°	534.1	536.5	539.0	540.5	541.0	541.6	542.1	542.7
40°	518.8	521.4	524.0	525.6	526.3	527.0	527.7	528.4
42.5°	503.8	506.6	509.5	511.2	511.8	512.3	512.9	513.4
45°	480.6	483.5	486.4	488.3	489.2	490.1	490.9	491.8
47.5°	456.0	459.1	462.1	464.1	465.2	466.2	467.3	468.3
50°	438.8	442.3	445.7	448.0	449.0	450.0	451.1	452.1
52.5°	421.4	424.8	428.3	430.5	431.6	432.6	433.6	434.7
55°	395.2	398.7	402.1	404.4	405.4	406.5	407.5	408.5
57.5°	367.7	371.9	376.0	378.5	379.5	380.4	381.4	382.4
60°	348.8	352.8	356.7	359.4	360.8	362.2	363.6	365.0
62.5°	330.1	334.1	338.1	340.7	342.1	343.5	344.9	346.3
65°	301.2	305.6	309.9	312.7	314.1	315.5	316.9	318.3
67.5°	272.9	277.3	281.7	284.5	285.9	287.2	288.6	289.9
70°	252.9	257.6	262.2	265.2	266.4	267.6	268.8	270.0
72.5°	233.9	238.5	243.0	245.9	247.3	248.6	250.0	251.3
75°	205.0	209.8	214.7	217.9	219.4	221.0	222.6	224.1
77.5°	178.1	183.0	187.9	191.2	192.8	194.5	196.1	197.8
80°	160.6	165.7	170.9	174.2	175.6	177.0	178.4	179.8
82.5°	143.4	148.7	154.1	157.5	159.0	160.5	162.0	163.6
85°	119.3	124.5	129.7	133.2	134.9	136.6	138.3	140.1
87.5°	104.6	110.0	115.3	118.8	120.4	122.0	123.6	125.3
90°	115.7	122.3	128.9	133.1	135.0	136.9	138.8	140.7
92.5°	110.8	117.2	123.6	127.6	129.1	130.6	132.1	133.5
95°	105.7	111.9	118.1	122.2	124.0	125.8	127.6	129.4
97.5°	102.9	107.6	112.3	115.5	117.3	119.0	120.7	122.5
100°	110.8	111.1	111.4	112.3	113.7	115.2	116.7	118.1
102.5°	216.7	173.9	131.1	110.3	111.7	113.1	114.5	115.9
105°	427.2	433.8	440.5	439.8	431.9	424.0	416.1	408.2
107.5°	509.6	515.0	520.4	524.2	526.4	528.7	530.9	533.1
110°	565.8	570.3	574.8	578.1	580.2	582.4	584.6	586.7



TEST NUMBER: P332574

CATALOG NUMBER: S124DIP-S575D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	619.7	623.4	627.2	630.2	632.6	634.9	637.3	639.7
115°	700.6	704.9	709.2	712.0	713.2	714.4	715.6	716.8
117.5°	781.6	785.1	788.6	791.0	792.3	793.5	794.8	796.1
120°	831.5	835.5	839.5	841.9	842.8	843.6	844.5	845.4
122.5°	881.0	884.7	888.5	890.8	891.5	892.2	892.9	893.7
125°	950.2	954.2	958.3	961.0	962.3	963.6	964.9	966.2
127.5°	1018.1	1021.1	1024.0	1026.0	1027.0	1027.9	1028.9	1029.9
130°	1059.5	1062.9	1066.3	1068.5	1069.5	1070.6	1071.6	1072.6
132.5°	1100.5	1103.7	1106.9	1109.0	1109.8	1110.6	1111.4	1112.3
135°	1155.8	1159.1	1162.3	1164.8	1166.3	1167.9	1169.4	1171.0
137.5°	1209.4	1212.5	1215.6	1217.5	1218.2	1218.9	1219.7	1220.4
140°	1242.8	1245.8	1248.8	1250.9	1252.0	1253.1	1254.2	1255.4
142.5°	1274.0	1276.5	1279.1	1280.7	1281.5	1282.3	1283.1	1283.9
145°	1319.1	1320.4	1321.7	1322.9	1324.1	1325.3	1326.6	1327.8
147.5°	1358.8	1359.1	1359.5	1360.0	1360.9	1361.7	1362.5	1363.3
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)