

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: P332574-940

Luminaire Tested: **S124DIP-S575D1205U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332574-940
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-S575D1205U940-4F0-1E-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: 6401.4 lumens
Efficiency: N/A
Efficacy: 129.6 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

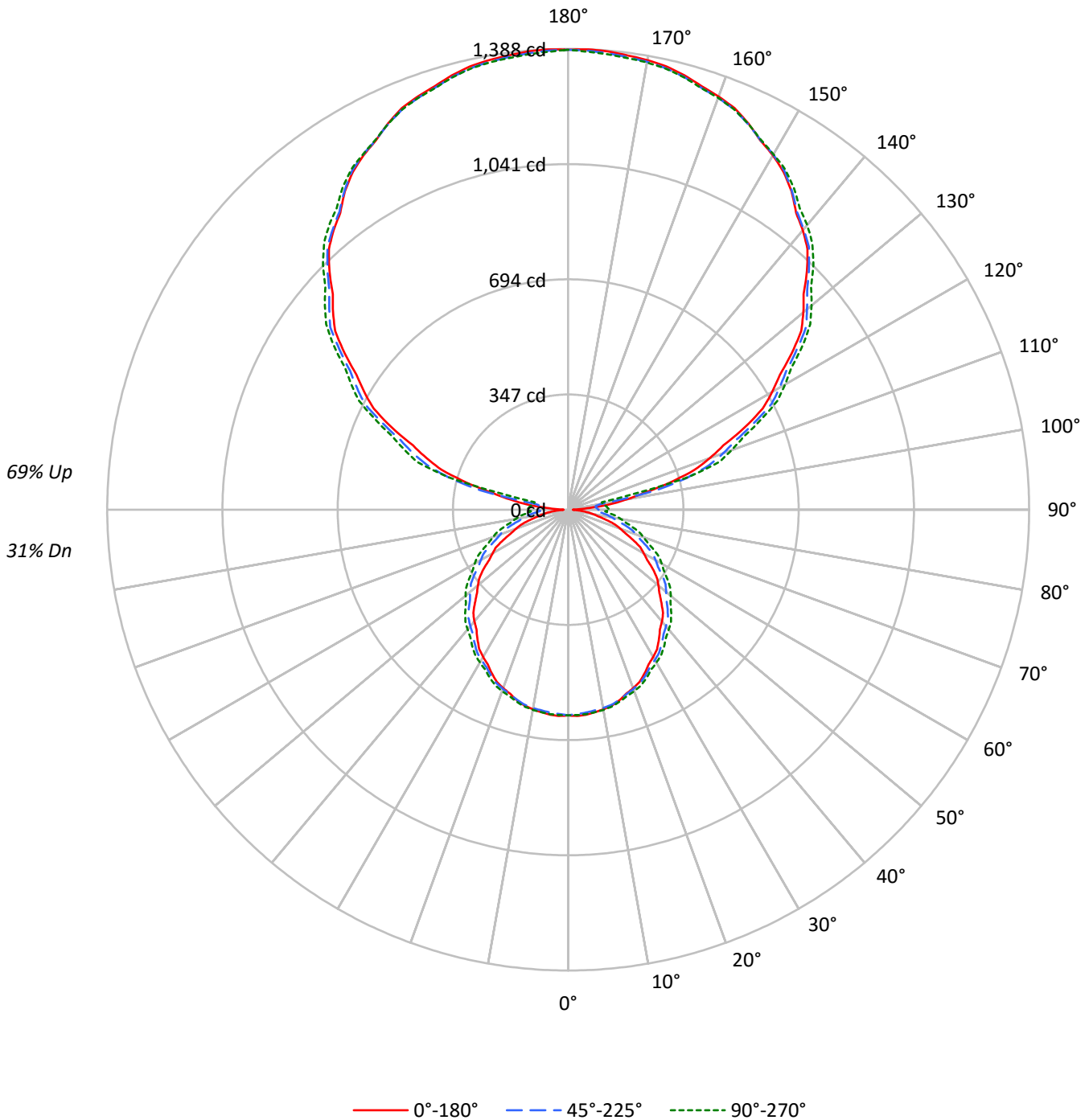
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-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°	5002	5002	5002
5°	5018	4889	4903
10°	4987	4809	4805
15°	4943	4717	4690
20°	4875	4614	4579
25°	4799	4500	4456
30°	4717	4386	4330
35°	4624	4269	4220
40°	4550	4158	4105
45°	4439	4056	4005
50°	4344	3938	3901
55°	4249	3827	3778
60°	4098	3685	3667
65°	3933	3533	3529
70°	3733	3359	3369
75°	3453	3169	3224
80°	3143	2984	3082
85°	2746	2820	2999



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	0.9
10°-20°	168.1	2.6
20°-30°	254.2	4.0
30°-40°	307.6	4.8
40°-50°	325.2	5.1
50°-60°	306.0	4.8
60°-70°	253.9	4.0
70°-80°	178.3	2.8
80°-90°	104.8	1.6
90°-100°	107.3	1.7
100°-110°	346.4	5.4
110°-120°	607.6	9.5
120°-130°	750.4	11.7
130°-140°	792.2	12.4
140°-150°	735.5	11.5
150°-160°	591.9	9.2
160°-170°	381.8	6.0
170°-180°	131.6	2.1
0°-30°	481.0	7.5
0°-40°	788.6	12.3
0°-60°	1419.8	22.2
0°-90°	1956.9	30.6
90°-120°	1061.3	16.6
90°-150°	3339.3	52.2
90°-180°	4445.0	69.4
0°-180°	6401.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	620	618	613	619	618	59
15°	595	595	593	599	599	167
25°	544	548	550	558	559	250
35°	476	484	491	501	503	298
45°	397	410	423	435	438	307
55°	311	326	346	360	364	277
65°	215	237	261	278	284	213
75°	119	145	174	193	200	127
85°	37	66	97	117	125	39
90°	14	53	92	117	126	10
95°	66	56	83	107	115	80
105°	318	339	369	392	364	333
115°	586	596	617	634	639	577
125°	821	825	840	856	862	733
135°	1017	1016	1025	1038	1044	783
145°	1172	1174	1174	1179	1184	732
155°	1284	1285	1282	1285	1283	592
165°	1354	1349	1349	1356	1348	383
175°	1385	1379	1380	1388	1377	132
180°	1385	1385	1385	1385	1385	



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	621.9	621.5	621.2	620.7	620.4	619.7	618.8	617.8	616.7	615.7	616.6
5°	620.4	619.9	619.4	618.9	618.5	617.7	616.6	615.5	614.5	613.4	614.7
7.5°	615.1	614.7	614.5	614.2	613.9	613.4	612.5	611.6	610.6	609.8	611.2
10°	610.6	610.5	610.3	610.2	610.0	609.6	608.8	608.0	607.3	606.5	607.9
12.5°	604.5	604.5	604.5	604.4	604.4	604.1	603.6	603.1	602.5	602.0	603.2
15°	594.7	594.9	594.9	595.1	595.3	595.1	594.7	594.2	593.7	593.3	594.7
17.5°	581.2	581.7	582.1	582.6	583.1	583.3	583.2	583.1	583.0	582.9	584.2
20°	571.8	572.2	572.7	573.2	573.6	573.9	574.1	574.3	574.4	574.5	576.0
22.5°	561.2	561.8	562.4	562.9	563.6	564.0	564.3	564.5	564.8	565.1	566.7
25°	544.0	544.9	545.9	546.8	547.7	548.4	548.8	549.3	549.8	550.3	552.0
27.5°	524.9	526.2	527.5	529.0	530.3	531.3	532.0	532.7	533.4	534.1	535.7
30°	512.1	513.4	514.5	515.8	517.0	518.2	519.2	520.3	521.4	522.5	524.2
32.5°	498.2	499.7	501.1	502.7	504.2	505.5	506.7	507.9	509.1	510.3	512.2
35°	476.0	477.9	479.7	481.5	483.4	485.1	486.6	488.2	489.7	491.2	493.5
37.5°	453.7	455.8	457.9	460.0	462.2	464.2	466.1	468.1	469.9	471.8	474.0
40°	439.3	441.2	443.3	445.2	447.3	449.3	451.5	453.6	455.8	458.0	460.3
42.5°	422.6	424.8	427.0	429.4	431.6	434.0	436.5	439.0	441.6	444.1	446.7
45°	396.9	399.8	402.8	405.7	408.6	411.5	414.5	417.4	420.4	423.3	425.9
47.5°	372.4	375.3	378.4	381.4	384.4	387.6	391.0	394.4	397.8	401.2	403.9
50°	354.5	357.9	361.3	364.8	368.2	371.6	375.0	378.4	381.7	385.1	388.2
52.5°	336.8	340.2	343.6	347.0	350.4	354.0	357.9	361.8	365.7	369.5	372.6
55°	310.9	314.1	317.4	320.6	323.8	327.7	332.3	337.0	341.6	346.3	349.4
57.5°	281.9	285.9	289.9	293.9	297.9	302.2	306.7	311.4	316.0	320.6	324.2
60°	263.0	267.0	271.0	275.0	279.0	283.6	288.6	293.7	298.8	303.9	307.5
62.5°	244.7	249.1	253.4	257.8	262.2	266.9	272.0	277.1	282.2	287.3	290.8
65°	215.1	220.1	225.0	229.9	234.9	240.0	245.1	250.4	255.7	260.9	264.7
67.5°	186.6	191.9	197.2	202.4	207.6	213.0	218.6	224.3	229.9	235.5	239.4
70°	167.2	172.5	177.7	183.0	188.2	193.8	199.6	205.5	211.3	217.2	221.3
72.5°	148.4	153.7	159.1	164.4	169.8	175.6	181.8	188.1	194.3	200.5	204.6
75°	119.3	125.0	130.7	136.4	142.1	148.3	154.7	161.2	167.7	174.2	178.5
77.5°	92.3	98.4	104.4	110.4	116.5	122.9	129.7	136.4	143.2	150.0	154.4
80°	75.6	81.8	88.0	94.2	100.3	106.7	113.6	120.4	127.2	133.9	138.6
82.5°	58.9	65.4	71.8	78.2	84.6	91.2	98.0	104.8	111.6	118.4	123.1
85°	36.7	43.2	49.8	56.2	62.7	69.4	76.3	83.3	90.2	97.1	101.7
87.5°	21.1	28.0	34.8	41.6	48.3	55.3	62.4	69.6	76.7	83.8	88.5
90°	14.2	22.9	31.7	40.3	49.0	57.6	66.1	74.5	83.0	91.5	97.4
92.5°	23.6	29.2	35.0	40.7	46.4	53.4	61.9	70.4	78.8	87.3	93.1
95°	66.0	63.3	60.5	57.8	55.0	57.0	63.5	70.1	76.6	83.2	88.7
97.5°	129.2	138.5	147.8	157.0	166.2	161.1	141.7	122.3	102.8	83.5	87.6
100°	177.5	185.7	193.9	202.1	210.2	201.3	175.6	149.8	124.1	98.4	98.5
102.5°	232.3	238.8	245.4	251.9	258.5	262.6	264.4	266.1	267.9	269.7	231.4
105°	318.2	322.6	327.1	331.5	336.0	341.6	348.5	355.3	362.2	369.1	375.0
107.5°	399.0	402.3	405.5	408.7	411.9	417.0	423.9	430.9	437.8	444.8	449.6
110°	453.2	456.0	458.9	461.7	464.6	469.4	476.2	483.0	489.7	496.5	500.5



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	505.7	508.8	511.9	515.1	518.3	522.7	528.5	534.3	540.1	545.9	549.3
115°	586.5	588.5	590.6	592.7	594.8	598.2	602.9	607.6	612.2	617.0	620.8
117.5°	659.9	661.6	663.4	665.1	666.9	670.3	675.5	680.6	685.6	690.7	693.8
120°	709.1	710.4	711.9	713.2	714.6	717.4	721.7	725.9	730.1	734.4	737.9
122.5°	755.5	756.2	756.8	757.4	758.0	760.6	765.2	769.7	774.3	778.8	782.2
125°	821.4	822.1	822.9	823.6	824.4	826.4	829.8	833.2	836.6	840.1	843.6
127.5°	884.1	884.2	884.3	884.4	884.5	886.5	890.6	894.6	898.6	902.6	905.3
130°	924.3	924.3	924.3	924.4	924.5	926.1	929.3	932.5	935.7	938.8	941.8
132.5°	961.5	961.8	962.1	962.3	962.6	964.1	967.0	969.8	972.7	975.5	978.4
135°	1016.8	1016.6	1016.4	1016.1	1015.8	1016.7	1018.8	1020.7	1022.8	1024.8	1027.7
137.5°	1066.3	1066.2	1066.2	1066.1	1066.0	1066.8	1068.4	1069.9	1071.4	1073.0	1075.7
140°	1098.7	1098.9	1099.3	1099.6	1099.8	1100.4	1100.9	1101.5	1102.2	1102.8	1105.5
142.5°	1127.1	1127.9	1128.7	1129.5	1130.3	1130.8	1131.0	1131.1	1131.3	1131.5	1133.8
145°	1171.5	1172.1	1172.6	1173.1	1173.7	1173.9	1173.9	1173.9	1173.9	1173.9	1175.1
147.5°	1206.9	1208.1	1209.2	1210.3	1211.5	1211.9	1211.7	1211.5	1211.2	1211.0	1211.3
150°	1232.6	1233.4	1234.2	1234.9	1235.7	1236.0	1235.7	1235.6	1235.3	1235.0	1235.0
152.5°	1253.7	1254.4	1255.1	1255.8	1256.5	1256.6	1256.2	1255.8	1255.4	1255.0	1255.4
155°	1283.8	1284.0	1284.2	1284.4	1284.7	1284.4	1283.8	1283.1	1282.4	1281.7	1282.6
157.5°	1309.2	1309.1	1308.9	1308.9	1308.7	1308.2	1307.4	1306.7	1305.9	1305.1	1306.3
160°	1324.2	1323.5	1322.8	1322.1	1321.4	1321.0	1320.7	1320.4	1320.3	1320.0	1321.4
162.5°	1337.4	1336.6	1335.7	1334.8	1333.9	1333.4	1333.1	1332.9	1332.7	1332.5	1333.8
165°	1354.2	1353.1	1351.9	1350.8	1349.6	1349.1	1349.1	1349.1	1349.1	1349.1	1350.9
167.5°	1367.4	1366.3	1365.1	1363.9	1362.7	1362.0	1361.9	1361.7	1361.6	1361.5	1363.5
170°	1374.9	1373.6	1372.2	1370.8	1369.4	1368.9	1369.0	1369.3	1369.5	1369.8	1371.6
172.5°	1379.9	1378.5	1377.2	1375.7	1374.4	1373.8	1374.0	1374.3	1374.5	1374.8	1376.5
175°	1385.3	1383.9	1382.5	1381.2	1379.7	1379.2	1379.4	1379.7	1379.9	1380.1	1382.2
177.5°	1387.8	1386.5	1385.2	1383.9	1382.6	1382.2	1382.5	1382.9	1383.3	1383.7	1385.1
180°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	619.6	619.6	619.6	619.6	619.6	619.6	619.6	619.6
2.5°	617.5	618.3	619.2	619.6	619.5	619.3	619.2	619.1
5°	615.9	617.1	618.3	618.8	618.8	618.6	618.4	618.2
7.5°	612.6	613.9	615.4	616.0	615.8	615.6	615.5	615.4
10°	609.2	610.6	612.0	612.6	612.5	612.3	612.2	612.0
12.5°	604.6	605.8	607.1	607.7	607.7	607.6	607.6	607.6
15°	596.0	597.4	598.8	599.4	599.3	599.1	599.0	598.8
17.5°	585.7	587.1	588.5	589.2	589.1	589.0	588.8	588.7
20°	577.7	579.2	580.7	581.5	581.5	581.5	581.5	581.5
22.5°	568.2	569.7	571.2	572.2	572.4	572.7	572.9	573.2
25°	553.7	555.4	557.1	557.9	558.1	558.3	558.4	558.6
27.5°	537.3	538.9	540.5	541.4	541.5	541.7	541.9	542.1
30°	525.9	527.6	529.3	530.3	530.6	530.9	531.2	531.5
32.5°	514.2	516.1	518.1	519.2	519.5	519.8	520.1	520.4
35°	495.6	497.8	499.9	501.2	501.7	502.1	502.6	503.1
37.5°	476.3	478.4	480.6	482.0	482.4	483.0	483.4	483.9
40°	462.6	464.9	467.3	468.7	469.3	469.9	470.6	471.2
42.5°	449.2	451.7	454.3	455.8	456.4	456.8	457.4	457.8
45°	428.6	431.1	433.7	435.4	436.2	437.0	437.7	438.5
47.5°	406.6	409.4	412.1	413.8	414.8	415.7	416.7	417.6
50°	391.3	394.4	397.4	399.5	400.4	401.3	402.3	403.1
52.5°	375.8	378.8	381.9	383.9	384.9	385.8	386.6	387.6
55°	352.4	355.5	358.6	360.6	361.5	362.5	363.4	364.3
57.5°	327.9	331.6	335.3	337.5	338.4	339.2	340.1	341.0
60°	311.0	314.6	318.1	320.5	321.7	323.0	324.2	325.5
62.5°	294.4	297.9	301.5	303.8	305.1	306.3	307.6	308.8
65°	268.6	272.5	276.3	278.8	280.1	281.3	282.6	283.8
67.5°	243.3	247.3	251.2	253.7	254.9	256.1	257.3	258.5
70°	225.5	229.7	233.8	236.5	237.6	238.6	239.7	240.8
72.5°	208.6	212.7	216.7	219.3	220.5	221.7	222.9	224.1
75°	182.8	187.1	191.5	194.3	195.6	197.1	198.5	199.8
77.5°	158.8	163.2	167.6	170.5	171.9	173.4	174.9	176.4
80°	143.2	147.8	152.4	155.3	156.6	157.8	159.1	160.3
82.5°	127.9	132.6	137.4	140.4	141.8	143.1	144.5	145.9
85°	106.4	111.0	115.7	118.8	120.3	121.8	123.3	124.9
87.5°	93.3	98.1	102.8	105.9	107.4	108.8	110.2	111.7
90°	103.2	109.1	114.9	118.7	120.4	122.1	123.8	125.5
92.5°	98.8	104.5	110.2	113.8	115.1	116.5	117.8	119.0
95°	94.3	99.8	105.3	109.0	110.6	112.2	113.8	115.4
97.5°	91.8	95.9	100.1	103.0	104.6	106.1	107.6	109.2
100°	98.8	99.1	99.3	100.1	101.4	102.7	104.1	105.3
102.5°	193.2	155.1	116.9	98.4	99.6	100.9	102.1	103.3
105°	380.9	386.8	392.8	392.2	385.1	378.1	371.0	364.0
107.5°	454.4	459.2	464.0	467.4	469.4	471.4	473.4	475.4
110°	504.5	508.5	512.6	515.5	517.4	519.3	521.3	523.2



TEST NUMBER: P332574-940

CATALOG NUMBER: S124DIP-S575D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	552.6	555.9	559.3	562.0	564.1	566.1	568.3	570.4
115°	624.7	628.6	632.4	634.9	636.0	637.0	638.1	639.2
117.5°	697.0	700.1	703.2	705.3	706.5	707.6	708.7	709.9
120°	741.5	745.0	748.6	750.7	751.5	752.2	753.0	753.9
122.5°	785.6	788.9	792.3	794.3	795.0	795.6	796.2	796.9
125°	847.3	850.9	854.5	856.9	858.1	859.3	860.4	861.6
127.5°	907.9	910.5	913.1	914.9	915.8	916.6	917.5	918.4
130°	944.8	947.8	950.8	952.8	953.7	954.7	955.6	956.4
132.5°	981.3	984.2	987.0	988.9	989.6	990.3	991.0	991.8
135°	1030.6	1033.6	1036.4	1038.7	1040.0	1041.4	1042.8	1044.2
137.5°	1078.4	1081.2	1084.0	1085.7	1086.3	1086.9	1087.6	1088.2
140°	1108.2	1110.9	1113.6	1115.4	1116.4	1117.4	1118.4	1119.5
142.5°	1136.0	1138.3	1140.6	1142.0	1142.7	1143.4	1144.2	1144.9
145°	1176.3	1177.4	1178.6	1179.6	1180.7	1181.8	1182.9	1184.0
147.5°	1211.7	1211.9	1212.3	1212.7	1213.5	1214.2	1215.0	1215.7
150°	1235.0	1235.0	1235.0	1235.2	1235.4	1235.6	1235.9	1236.1
152.5°	1255.7	1256.1	1256.4	1256.5	1256.4	1256.2	1256.2	1256.0
155°	1283.5	1284.4	1285.4	1285.5	1284.8	1284.1	1283.4	1282.7
157.5°	1307.5	1308.7	1309.9	1309.9	1308.7	1307.5	1306.3	1305.1
160°	1322.8	1324.2	1325.5	1325.5	1324.2	1322.8	1321.4	1320.0
162.5°	1335.2	1336.6	1338.0	1337.9	1336.3	1334.8	1333.2	1331.6
165°	1352.7	1354.6	1356.4	1356.3	1354.2	1352.1	1350.1	1348.0
167.5°	1365.6	1367.5	1369.6	1369.4	1367.2	1364.9	1362.5	1360.2
170°	1373.4	1375.3	1377.2	1376.9	1374.6	1372.3	1370.0	1367.7
172.5°	1378.4	1380.3	1382.1	1381.8	1379.3	1376.8	1374.3	1371.8
175°	1384.3	1386.3	1388.4	1388.0	1385.3	1382.5	1379.7	1377.0
177.5°	1386.6	1388.0	1389.6	1389.2	1387.0	1384.7	1382.5	1380.4
180°	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3	1385.3

(END OF REPORT)