

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: P333192-840

Luminaire Tested: **S125DIP-S610D1035U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333192-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D1035U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6176.6 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

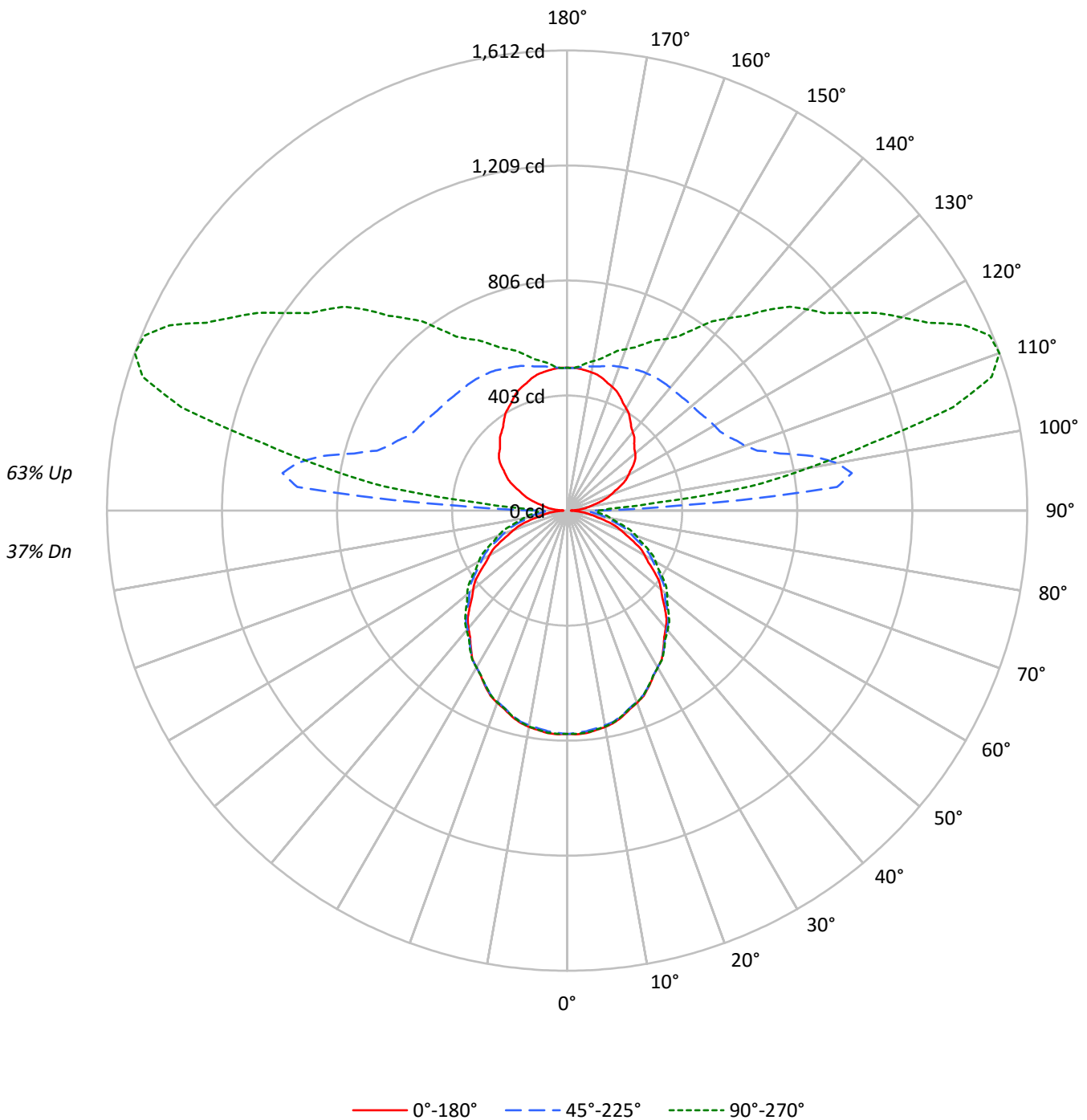
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

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	59	59	59	44	44	44	37
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30
2	86	78	72	67	77	71	66	61	57	53	50	45	42	40	33	31	30	25
3	78	68	61	55	70	62	56	51	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	43	45	39	35	35	31	28	26	24	22	18
5	65	54	46	40	59	49	42	36	40	34	30	31	27	24	23	21	19	15
6	60	48	40	34	54	44	37	31	36	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	26	22	19	19	17	14	12
8	51	39	31	26	46	36	29	24	29	24	20	23	19	17	18	15	13	10
9	48	36	28	23	43	33	26	21	27	22	18	21	18	15	16	14	12	9
10	44	33	25	21	40	30	23	19	25	20	16	20	16	13	15	12	11	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.2
10°-20°	210.1	3.4
20°-30°	312.4	5.1
30°-40°	370.1	6.0
40°-50°	382.6	6.2
50°-60°	352.5	5.7
60°-70°	284.9	4.6
70°-80°	190.8	3.1
80°-90°	101.7	1.6
90°-100°	418.0	6.8
100°-110°	820.1	13.3
110°-120°	758.7	12.3
120°-130°	608.2	9.8
130°-140°	482.4	7.8
140°-150°	360.3	5.8
150°-160°	252.6	4.1
160°-170°	148.9	2.4
170°-180°	48.4	0.8
0°-30°	596.5	9.7
0°-40°	966.6	15.6
0°-60°	1701.7	27.6
0°-90°	2279.2	36.9
90°-120°	1996.7	32.3
90°-150°	3447.5	55.8
90°-180°	3897.0	63.1
0°-180°	6176.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	46	79	101	109	10
95°	43	129	949	478	315	43
105°	121	179	773	1496	1399	127
115°	208	256	617	1308	1536	205
125°	285	334	580	1036	1206	253
135°	332	399	565	859	994	258
145°	386	441	560	702	775	242
155°	440	473	546	618	644	202
165°	480	493	524	556	564	135
175°	499	499	503	509	507	47
180°	500	500	500	500	500	



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.1	29.8	35.6	41.5	47.4	53.4	59.4	65.6	71.6	77.8	81.9
90°	13.3	19.8	27.3	34.7	42.2	49.8	56.7	64.4	71.2	79.1	84.0
92.5°	23.3	31.0	44.5	62.1	84.4	119.4	180.4	278.6	384.8	385.5	327.4
95°	43.2	48.7	61.2	76.7	103.3	153.8	267.5	495.0	779.1	949.2	933.8
97.5°	64.3	69.5	79.2	94.2	118.2	155.6	232.6	400.7	697.4	1006.0	1161.6
100°	79.0	84.6	92.2	106.8	129.7	164.4	228.3	364.9	624.3	959.5	1215.1
102.5°	95.3	99.9	106.3	121.6	142.4	176.2	233.5	348.9	568.8	880.4	1178.6
105°	120.8	123.5	131.3	144.1	163.0	195.1	244.6	339.4	512.9	773.1	1065.8
107.5°	145.7	150.1	157.2	167.7	186.8	215.9	263.7	345.5	487.7	698.6	951.6
110°	163.6	167.7	173.8	184.9	202.1	231.7	277.8	352.1	478.9	663.1	886.2



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.2	185.8	190.7	201.5	218.1	246.7	291.0	361.2	476.6	641.3	836.8
115°	208.2	211.5	215.7	225.9	242.3	270.2	312.0	374.9	476.2	616.6	782.0
117.5°	231.7	235.5	239.5	249.3	267.3	294.2	333.7	391.0	479.3	602.7	747.7
120°	247.8	251.4	255.9	265.5	283.2	310.5	349.7	402.0	483.6	595.4	728.3
122.5°	264.1	266.6	270.0	279.3	298.3	325.6	364.7	414.3	487.0	589.0	711.2
125°	285.4	287.2	292.1	300.9	319.9	347.8	384.5	431.2	493.1	580.2	687.7
127.5°	301.3	304.2	310.4	321.7	341.9	369.5	404.3	447.1	500.9	574.2	665.9
130°	311.7	314.7	322.6	335.5	356.5	383.7	417.5	458.2	505.8	570.8	651.8
132.5°	319.2	323.1	332.6	347.4	369.3	396.5	429.5	467.3	511.2	568.4	639.6
135°	332.2	336.1	348.0	364.0	385.0	412.6	445.1	479.6	518.1	564.6	624.3
137.5°	348.6	351.4	362.6	378.6	399.2	427.5	456.5	489.0	525.0	563.1	611.1
140°	357.6	360.6	372.7	388.9	408.1	435.4	464.7	495.1	527.6	562.1	604.2
142.5°	368.9	371.0	382.1	398.2	416.4	441.9	469.6	498.3	529.0	561.6	598.7
145°	385.9	387.7	397.6	411.5	429.5	452.6	478.9	504.0	531.3	560.5	591.6
147.5°	402.8	404.0	412.7	425.9	441.5	461.9	484.9	507.7	532.3	557.8	584.8
150°	413.3	415.4	422.4	435.6	449.6	466.8	489.0	510.1	532.3	555.4	579.7
152.5°	424.6	425.9	432.1	443.5	456.9	472.4	493.0	511.7	531.5	552.3	574.0
155°	439.5	439.5	445.6	455.7	465.7	479.9	497.0	513.1	529.3	546.4	564.5
157.5°	452.8	452.6	457.5	466.2	475.0	485.7	500.4	514.1	526.6	540.4	555.6
160°	461.7	460.7	464.7	471.8	479.9	489.0	502.0	514.1	524.2	536.3	548.5
162.5°	469.0	468.0	472.0	478.3	484.7	492.2	503.6	513.3	521.8	531.5	542.0
165°	479.9	477.9	480.9	485.9	490.0	496.0	504.0	512.1	518.2	524.2	532.3
167.5°	487.2	486.1	488.0	490.8	493.6	497.4	504.0	509.7	512.5	517.2	522.8
170°	492.0	491.0	492.0	494.0	496.0	499.0	504.0	508.1	510.1	513.1	517.2
172.5°	495.2	493.4	494.4	496.3	497.6	499.0	503.2	506.4	506.9	508.3	511.5
175°	499.0	497.0	498.0	499.0	499.0	499.0	502.0	504.0	503.0	503.0	504.0
177.5°	500.8	499.2	499.2	500.0	499.2	499.2	500.8	501.6	500.0	500.0	500.8
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	86.0	90.2	94.3	97.3	98.5	99.7	101.1	102.2
90°	88.9	93.8	98.8	103.3	104.5	105.7	108.0	109.2
92.5°	246.7	201.5	173.2	160.8	149.1	147.8	147.6	147.1
95°	788.4	638.8	518.7	436.4	366.1	337.0	330.1	315.2
97.5°	1138.8	1034.9	917.8	802.3	741.2	685.9	657.8	646.1
100°	1296.3	1250.4	1150.1	1047.6	979.1	907.6	871.3	856.2
102.5°	1347.6	1381.5	1335.1	1266.4	1193.0	1142.4	1102.9	1091.8
105°	1311.2	1452.7	1500.5	1491.7	1460.7	1428.6	1409.6	1398.7
107.5°	1193.8	1381.4	1498.6	1553.5	1570.9	1571.8	1566.2	1559.1
110°	1107.1	1301.9	1447.2	1535.2	1581.8	1602.0	1610.3	1611.5



TEST NUMBER: P333192-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1038.2	1223.2	1370.1	1473.3	1540.8	1574.9	1593.6	1602.0
115°	951.4	1110.8	1251.9	1363.9	1443.5	1493.0	1522.2	1536.3
117.5°	893.7	1031.4	1153.3	1256.1	1335.8	1387.0	1416.2	1425.4
120°	862.3	986.1	1099.9	1190.6	1266.3	1315.7	1343.9	1353.0
122.5°	837.8	952.6	1054.2	1139.1	1206.7	1252.1	1280.3	1288.6
125°	802.3	908.0	998.4	1072.8	1130.0	1172.3	1195.3	1206.2
127.5°	766.2	864.6	949.1	1018.8	1071.0	1108.4	1130.4	1135.8
130°	743.9	835.1	916.0	983.2	1034.4	1068.5	1089.5	1096.5
132.5°	721.2	806.8	880.5	945.1	996.3	1030.3	1049.6	1057.1
135°	691.1	762.9	829.6	888.6	933.8	967.9	986.9	993.8
137.5°	665.7	724.0	779.6	829.7	870.2	901.1	918.5	925.8
140°	651.5	700.7	749.0	792.6	830.6	857.5	873.3	879.0
142.5°	639.2	681.0	722.5	760.3	792.6	815.6	830.5	835.5
145°	623.7	655.8	687.9	715.9	740.8	758.6	770.4	775.1
147.5°	609.7	635.3	659.6	680.4	699.9	714.0	720.6	722.8
150°	601.9	624.0	643.2	661.5	676.7	688.9	693.2	694.4
152.5°	593.8	613.5	631.1	645.2	657.9	667.6	671.8	672.8
155°	581.7	597.8	612.0	623.0	633.1	640.2	643.2	644.2
157.5°	569.6	582.9	593.8	602.5	610.4	616.1	618.9	618.7
160°	561.5	571.6	581.7	588.8	595.8	600.9	602.9	601.9
162.5°	552.7	561.9	570.4	576.6	582.1	586.3	586.7	586.5
165°	540.4	547.4	553.5	558.5	562.5	564.5	564.5	564.5
167.5°	528.7	533.3	538.0	541.6	543.6	545.4	544.6	544.4
170°	522.2	525.2	528.3	530.3	532.3	533.3	533.3	532.3
172.5°	514.9	518.0	520.2	521.4	521.8	523.6	522.0	521.0
175°	507.1	507.1	509.1	509.1	509.1	510.1	508.1	507.1
177.5°	501.6	502.4	502.4	502.4	501.6	502.4	500.0	500.0
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

(END OF REPORT)