

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: P333159-830

Luminaire Tested: **S125DIP-S375D1205U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333159-830
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-S375D1205U830-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5509.5 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

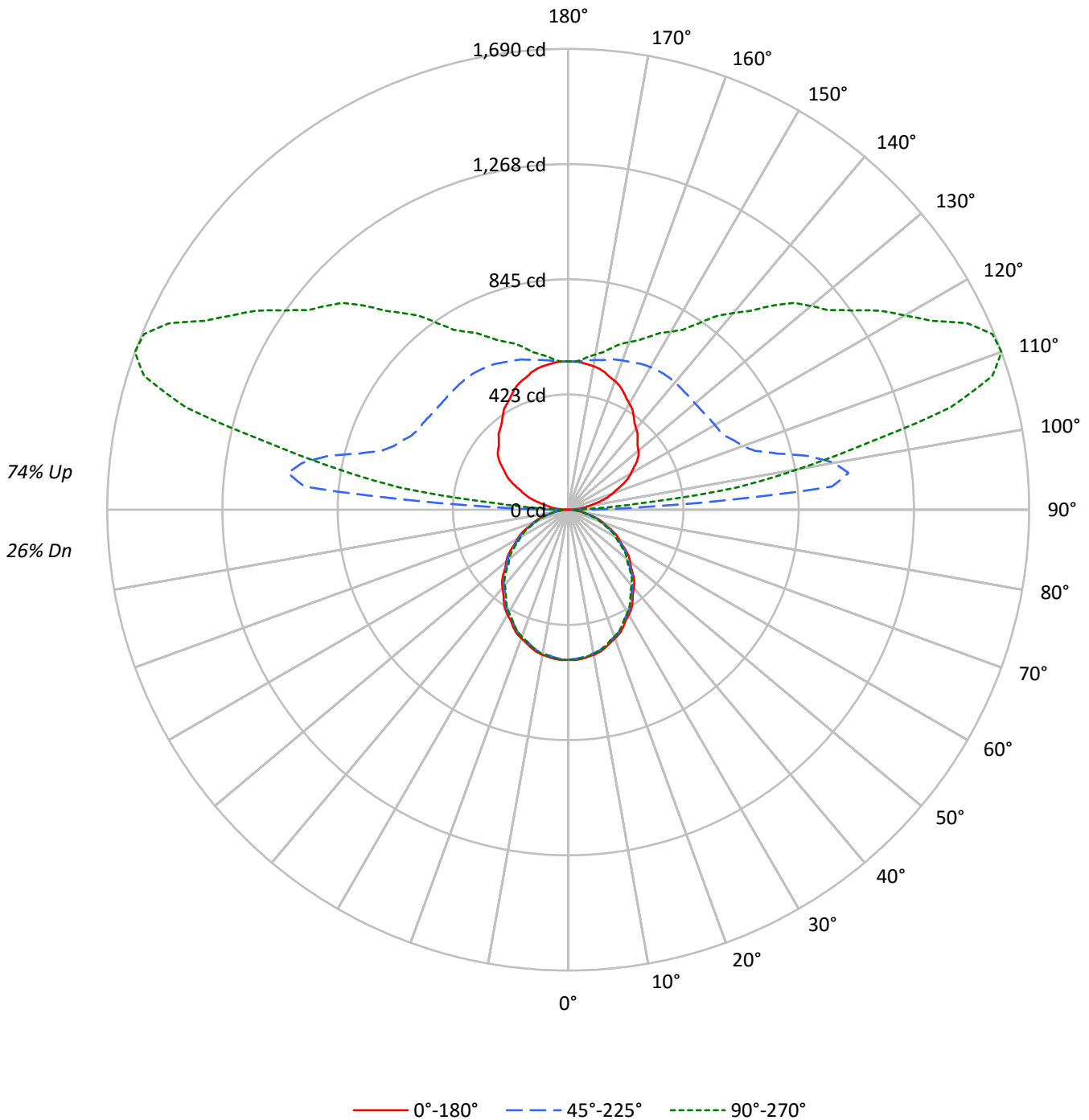
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15	12
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	0.9
10°-20°	146.6	2.7
20°-30°	216.5	3.9
30°-40°	252.7	4.6
40°-50°	253.8	4.6
50°-60°	222.8	4.0
60°-70°	166.0	3.0
70°-80°	94.9	1.7
80°-90°	30.6	0.6
90°-100°	393.7	7.1
100°-110°	846.4	15.4
110°-120°	794.4	14.4
120°-130°	643.8	11.7
130°-140°	516.6	9.4
140°-150°	389.9	7.1
150°-160°	274.4	5.0
160°-170°	161.8	2.9
170°-180°	52.6	1.0
0°-30°	415.1	7.5
0°-40°	667.8	12.1
0°-60°	1144.3	20.8
0°-90°	1435.8	26.1
90°-120°	2034.5	36.9
90°-150°	3584.8	65.1
90°-180°	4074.0	73.9
0°-180°	5509.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	1	10	18	23	25	3
95°	36	107	970	440	257	38
105°	124	173	794	1563	1451	130
115°	221	267	637	1374	1616	218
125°	307	359	611	1093	1274	272
135°	359	432	607	916	1058	279
145°	418	479	609	758	834	262
155°	478	514	594	671	700	220
165°	521	536	570	604	613	147
175°	542	542	546	553	551	51
180°	543	543	543	543	543	



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.6	9.8	10.3	10.7	11.1	11.6	11.7	12.1	12.2	12.5	12.8
90°	1.1	2.2	4.3	6.6	8.8	10.9	12.1	14.2	15.4	17.5	18.7
92.5°	13.4	16.2	25.4	39.0	57.9	89.8	149.6	250.0	358.8	353.1	285.9
95°	36.1	37.2	46.0	58.1	82.1	131.4	248.6	489.6	791.8	970.3	949.5
97.5°	60.0	61.4	67.5	79.6	101.2	136.7	214.2	390.8	707.1	1036.2	1201.5
100°	76.6	78.9	83.2	95.3	116.1	148.9	212.4	354.9	630.8	988.9	1262.7
102.5°	95.1	96.4	99.9	112.8	131.9	163.8	220.4	340.0	573.0	905.7	1226.0
105°	123.8	123.8	129.2	140.2	157.7	188.4	236.6	334.0	516.9	794.0	1108.3
107.5°	151.7	154.0	159.2	168.2	186.4	214.0	260.6	344.1	493.2	717.1	988.4
110°	171.9	174.2	178.5	188.4	204.8	233.3	278.1	353.7	486.3	681.2	919.9



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	192.1	194.3	197.7	207.6	224.0	251.7	294.8	366.0	486.3	660.2	869.1
115°	221.2	223.4	226.7	236.6	253.0	280.4	320.9	384.4	489.6	637.4	813.7
117.5°	247.5	250.8	254.3	264.2	282.8	309.2	347.6	405.5	496.8	626.2	780.6
120°	265.0	268.3	272.7	282.6	301.1	328.6	366.9	419.4	503.8	620.9	762.2
122.5°	283.4	285.9	289.4	299.2	319.6	346.9	385.3	435.3	509.9	616.6	746.5
125°	306.6	308.9	314.3	324.1	345.0	373.4	409.6	456.7	520.2	611.1	725.0
127.5°	324.8	328.1	335.2	347.6	369.8	398.2	433.0	476.5	531.8	608.5	705.3
130°	336.2	339.5	348.3	362.5	385.5	414.0	447.9	489.6	538.9	606.7	692.2
132.5°	345.0	349.1	359.7	375.7	399.5	428.0	461.9	501.0	546.7	606.7	681.6
135°	359.2	363.6	376.7	394.3	417.3	446.9	480.8	516.9	557.4	606.7	669.2
137.5°	377.2	380.5	392.8	410.3	432.8	463.3	494.2	528.8	567.3	608.0	658.0
140°	387.7	391.0	404.2	421.7	442.4	472.0	503.8	536.7	571.7	608.9	652.7
142.5°	399.9	402.4	414.6	432.2	452.1	479.9	509.9	541.0	574.3	609.8	648.4
145°	418.4	420.6	431.5	446.9	466.6	491.7	520.2	547.6	577.2	608.9	641.8
147.5°	437.6	438.9	448.4	462.6	479.7	501.8	526.8	551.6	578.2	606.1	635.0
150°	449.0	451.2	458.9	473.2	488.4	507.1	531.1	554.2	578.2	603.4	629.7
152.5°	461.3	462.6	469.4	481.9	496.3	513.2	535.6	555.9	577.4	599.9	623.6
155°	477.5	477.5	484.1	495.0	506.0	521.3	539.9	557.4	575.0	593.6	613.3
157.5°	492.0	491.7	497.0	506.4	516.0	527.6	543.7	558.6	572.1	587.0	603.7
160°	501.6	500.5	504.9	512.6	521.3	531.1	545.4	558.6	569.5	582.7	595.8
162.5°	509.4	508.4	512.7	519.5	526.6	534.7	547.1	557.7	566.8	577.4	588.8
165°	521.3	519.2	522.5	527.9	532.3	538.9	547.6	556.4	562.9	569.5	578.2
167.5°	529.2	528.1	530.1	533.1	536.2	540.4	547.6	553.7	556.8	561.8	568.0
170°	534.4	533.4	534.4	536.7	538.9	542.2	547.6	552.0	554.2	557.4	561.8
172.5°	538.0	536.0	537.1	539.2	540.5	542.2	546.7	550.3	550.6	552.2	555.7
175°	542.2	539.9	541.0	542.2	542.2	542.2	545.4	547.6	546.5	546.5	547.6
177.5°	544.1	542.3	542.3	543.2	542.3	542.3	544.1	545.0	543.2	543.2	544.1
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	13.0	13.2	13.5	13.8	13.7	13.5	13.6	13.4
90°	19.7	20.8	21.9	24.1	24.1	24.1	25.2	25.2
92.5°	194.1	140.8	106.0	89.8	75.8	73.1	71.6	69.8
95°	787.4	620.9	486.3	394.3	316.5	283.6	274.9	257.4
97.5°	1172.7	1056.0	924.8	796.8	729.2	667.9	636.1	622.1
100°	1347.1	1293.5	1180.6	1066.7	991.2	912.3	871.8	854.2
102.5°	1405.8	1438.9	1384.8	1307.7	1226.8	1170.7	1126.7	1113.6
105°	1371.2	1521.3	1569.4	1557.4	1522.3	1486.2	1464.2	1451.1
107.5°	1247.6	1447.8	1571.6	1628.8	1646.5	1646.3	1639.1	1630.3
110°	1156.5	1364.6	1519.0	1612.1	1661.4	1682.2	1689.9	1689.9



TEST NUMBER: P333159-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1084.7	1282.2	1438.4	1548.1	1620.2	1656.0	1675.0	1682.9
115°	994.5	1164.2	1314.2	1433.6	1519.0	1571.6	1602.2	1616.5
117.5°	936.1	1082.5	1211.7	1321.3	1406.7	1461.0	1491.5	1500.2
120°	904.7	1036.0	1156.5	1252.9	1334.0	1386.5	1416.1	1424.8
122.5°	881.0	1002.8	1110.1	1200.3	1272.6	1320.8	1350.4	1358.3
125°	846.6	958.3	1053.6	1132.5	1193.7	1238.7	1262.7	1273.8
127.5°	811.5	915.8	1004.8	1078.6	1134.2	1173.8	1196.7	1201.5
130°	789.7	886.0	971.5	1042.6	1097.4	1133.5	1155.5	1162.0
132.5°	767.7	858.0	935.5	1004.1	1058.9	1095.0	1115.1	1122.6
135°	739.2	814.8	885.0	947.3	995.5	1031.7	1051.4	1058.0
137.5°	715.2	776.3	834.5	887.6	930.7	963.6	981.8	988.9
140°	702.0	753.5	803.9	849.9	890.4	918.9	935.3	940.8
142.5°	690.6	734.2	777.6	817.5	851.9	875.9	891.5	896.1
145°	675.7	709.6	743.7	773.2	799.5	818.1	830.2	834.5
147.5°	661.8	689.3	715.4	737.7	758.6	773.5	780.4	782.4
150°	653.8	678.0	698.7	718.4	734.9	748.0	752.4	753.5
152.5°	645.1	666.6	685.6	701.0	714.7	725.2	729.6	730.8
155°	631.9	649.4	664.8	676.8	687.8	695.4	698.7	699.8
157.5°	618.8	633.2	645.1	654.5	663.0	669.4	672.4	672.2
160°	610.0	620.9	631.9	639.6	647.2	652.7	655.0	653.8
162.5°	600.4	610.5	619.6	626.4	632.4	637.0	637.4	637.2
165°	587.0	594.7	601.2	606.7	611.1	613.3	613.3	613.3
167.5°	574.3	579.4	584.4	588.3	590.5	592.5	591.6	591.4
170°	567.3	570.6	573.9	576.1	578.2	579.4	579.4	578.2
172.5°	559.4	562.7	565.1	566.5	566.8	568.8	567.1	566.0
175°	550.9	550.9	553.1	553.1	553.1	554.2	552.0	550.9
177.5°	545.0	545.8	545.8	545.8	545.0	545.8	543.2	543.2
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2

(END OF REPORT)