

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: P333147-830

Luminaire Tested: **S125DIP-S375D1035U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333147-830  
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-S375D1035U830-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 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: 4878.6 lumens  
Efficiency: N/A  
Efficacy: 130.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

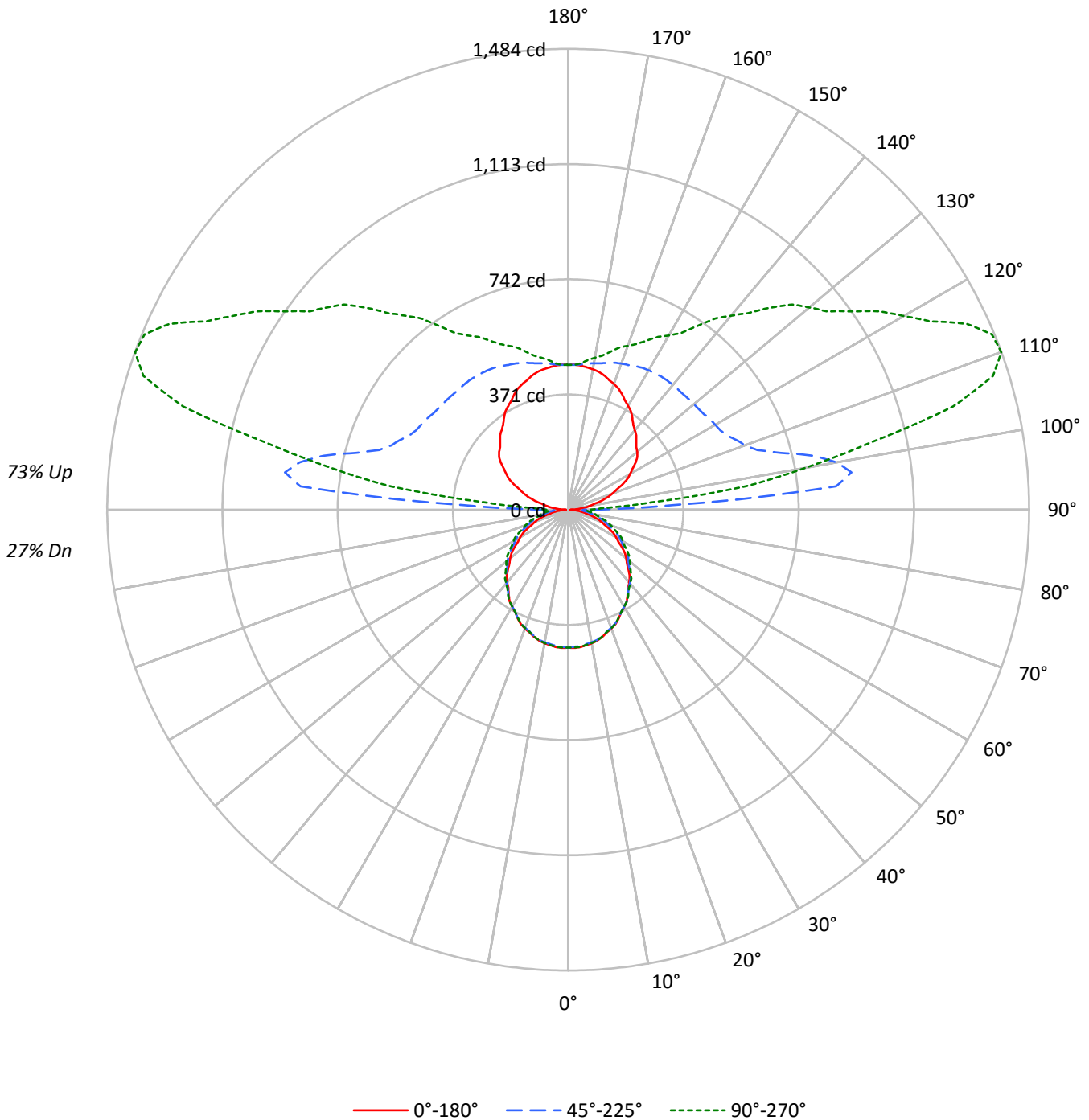
Input Watts (W): 37.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

### Luminous Intensity Polar Plot





TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	92	88	84	80	82	78	75	72	61	59	57	45	43	42	30	29	28	22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	42	39	34	32	29	23	21	20	15
4	70	59	51	45	62	53	46	41	41	37	33	30	27	25	20	19	17	13
5	64	52	44	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11
6	58	47	39	33	52	42	35	30	33	28	24	24	21	19	17	14	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10	7
9	46	35	27	22	41	31	25	20	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	38	28	22	18	23	18	15	17	14	11	12	10	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.0	0.9
10°-20°	119.3	2.4
20°-30°	177.4	3.6
30°-40°	210.1	4.3
40°-50°	217.2	4.5
50°-60°	200.1	4.1
60°-70°	161.8	3.3
70°-80°	108.3	2.2
80°-90°	58.8	1.2
90°-100°	369.8	7.6
100°-110°	750.4	15.4
110°-120°	698.0	14.3
120°-130°	561.9	11.5
130°-140°	447.7	9.2
140°-150°	335.7	6.9
150°-160°	235.8	4.8
160°-170°	139.0	2.8
170°-180°	45.2	0.9
0°-30°	338.7	6.9
0°-40°	548.8	11.2
0°-60°	966.1	19.8
0°-90°	1294.9	26.5
90°-120°	1818.3	37.3
90°-150°	3163.7	64.8
90°-180°	3584.0	73.5
0°-180°	4878.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	29	51	65	70	6
95°	37	109	865	419	266	37
105°	110	160	706	1376	1282	116
115°	193	235	565	1205	1416	190
125°	265	310	535	956	1113	235
135°	310	372	525	796	920	240
145°	360	412	523	654	721	225
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.1	20.5	24.0	27.5	31.1	34.5	38.2	41.7	45.3	47.8
90°	7.9	12.0	17.0	21.9	26.9	32.0	36.2	41.4	45.6	50.8	53.9
92.5°	17.7	23.1	33.8	48.4	67.4	98.0	152.8	242.3	339.2	337.7	282.0
95°	36.8	40.2	50.2	63.1	86.3	131.6	235.5	445.8	708.8	865.4	849.7
97.5°	56.7	60.1	67.7	80.2	101.1	134.3	204.2	359.0	633.9	919.9	1063.8
100°	70.7	74.6	80.4	92.7	112.6	143.5	201.1	326.5	566.8	877.5	1114.7
102.5°	86.1	89.2	94.0	107.0	125.3	155.1	206.7	312.5	515.8	804.6	1081.7
105°	110.3	111.8	118.0	129.0	145.6	174.2	218.5	305.1	465.1	706.2	978.1
107.5°	133.8	137.0	142.8	151.8	168.8	194.5	237.4	311.9	442.9	638.0	872.9
110°	150.8	153.8	158.7	168.3	183.6	210.1	251.4	319.0	435.5	605.7	812.7



TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.1	170.9	174.8	184.3	199.3	224.8	264.5	328.3	434.2	586.3	767.5
115°	192.7	195.2	198.8	207.9	222.6	247.8	285.1	342.2	435.1	564.6	717.8
117.5°	214.8	218.1	221.6	230.5	246.9	271.1	306.4	358.4	439.3	552.9	687.2
120°	229.9	233.0	237.0	245.8	262.1	286.9	322.1	369.4	444.1	547.0	670.1
122.5°	245.3	247.5	250.7	259.3	276.9	301.6	336.7	381.7	448.1	541.9	655.0
125°	265.2	267.0	271.5	279.9	297.7	323.1	356.1	398.5	455.1	535.1	634.4
127.5°	280.4	283.1	289.1	299.6	318.6	343.7	375.3	414.2	463.4	530.7	615.4
130°	290.2	292.8	300.3	312.5	332.2	357.2	387.8	424.8	468.5	528.2	602.9
132.5°	297.4	300.9	309.9	323.7	344.1	369.1	399.4	433.9	474.2	526.9	592.6
135°	309.5	313.1	324.3	339.3	359.0	384.7	414.5	446.2	481.7	524.7	579.7
137.5°	324.8	327.5	338.0	353.0	372.3	398.6	425.5	455.5	489.0	524.3	568.4
140°	333.6	336.3	347.6	362.7	380.6	406.0	433.4	461.8	491.9	524.1	562.7
142.5°	344.0	346.0	356.5	371.5	388.5	412.4	438.2	465.0	493.6	524.1	558.1
145°	359.9	361.7	371.0	384.0	400.9	422.4	447.0	470.4	495.9	523.1	551.9
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.7
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	50.1	52.6	55.0	56.8	57.5	58.2	59.1	59.8
90°	57.1	60.3	63.4	66.7	67.5	68.1	69.7	70.4
92.5°	205.4	161.7	134.0	121.5	110.1	108.6	107.9	107.1
95°	712.6	571.7	458.1	380.4	314.3	286.8	279.9	265.5
97.5°	1041.2	942.9	832.3	723.7	666.2	614.2	587.6	576.2
100°	1189.3	1145.2	1050.3	953.8	889.4	822.3	788.1	773.5
102.5°	1238.1	1268.6	1224.0	1159.0	1090.1	1042.5	1005.3	994.7
105°	1205.9	1336.7	1380.1	1371.0	1341.5	1311.2	1293.1	1282.4
107.5°	1097.6	1271.5	1379.8	1430.1	1446.0	1446.3	1440.8	1433.8
110°	1017.8	1198.3	1332.8	1414.1	1457.2	1475.6	1483.0	1483.7





TEST NUMBER: P333147-830

CATALOG NUMBER: S125DIP-S375D1035U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	954.5	1126.0	1262.0	1357.4	1420.0	1451.3	1468.4	1475.8
115°	874.9	1022.4	1153.0	1256.8	1330.8	1376.5	1403.4	1416.3
117.5°	822.5	949.8	1062.5	1157.7	1231.8	1279.1	1306.0	1314.1
120°	794.0	908.5	1013.7	1097.6	1167.8	1213.5	1239.5	1247.6
122.5°	772.1	878.4	972.1	1050.7	1113.4	1155.4	1181.4	1188.7
125°	740.5	837.9	921.3	990.1	1043.3	1082.4	1103.5	1113.4
127.5°	708.1	799.1	876.9	941.3	989.7	1024.4	1044.4	1049.1
130°	688.1	772.2	847.0	909.1	956.6	988.2	1007.4	1013.5
132.5°	667.9	746.8	814.7	874.5	922.0	953.4	971.1	978.0
135°	641.1	707.3	768.7	823.3	865.2	896.7	914.1	920.2
137.5°	618.6	672.2	723.5	769.8	807.2	835.8	851.9	858.5
140°	606.1	651.4	695.8	736.0	771.2	796.1	810.6	815.7
142.5°	595.3	633.7	671.8	706.7	736.7	757.8	771.6	775.9
145°	581.5	611.1	640.8	666.7	689.7	706.0	716.7	720.9
147.5°	568.8	592.7	615.2	634.6	652.6	665.6	671.8	673.6
150°	561.8	582.4	600.3	617.3	631.5	642.9	646.8	647.8
152.5°	554.2	572.6	589.0	602.2	614.1	623.1	626.9	627.8
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

(END OF REPORT)