

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: P333139

Luminaire Tested: **S125DIP-S375D810U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333139
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D810U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4762.0 lumens
Efficiency: N/A
Efficacy: 152.6 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

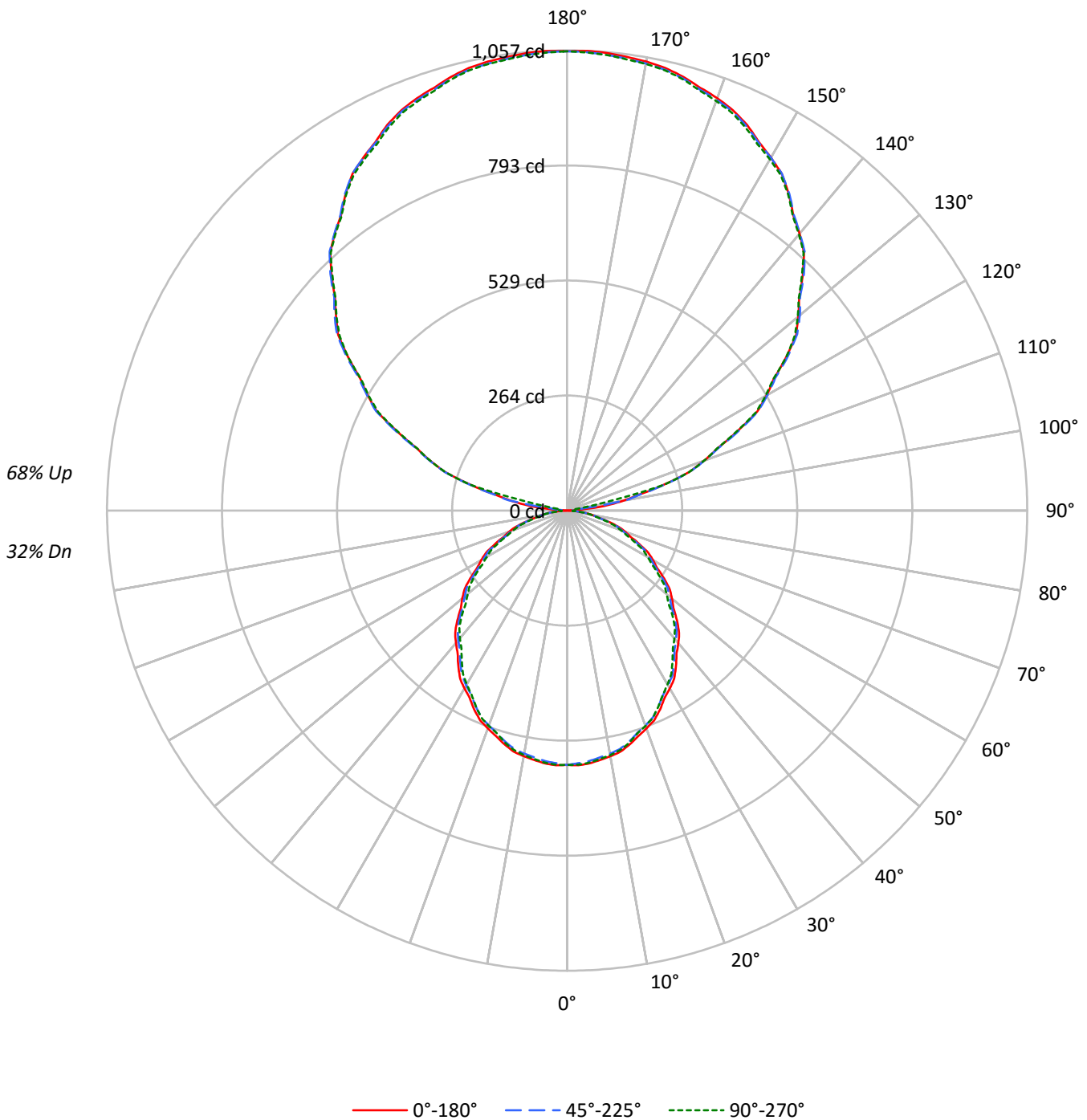
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

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	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	50	43	41	38	31	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.2
10°-20°	155.6	3.3
20°-30°	229.7	4.8
30°-40°	268.1	5.6
40°-50°	269.2	5.7
50°-60°	236.3	5.0
60°-70°	176.1	3.7
70°-80°	100.7	2.1
80°-90°	31.5	0.7
90°-100°	38.3	0.8
100°-110°	236.3	5.0
110°-120°	428.5	9.0
120°-130°	550.0	11.5
130°-140°	591.5	12.4
140°-150°	555.2	11.7
150°-160°	449.1	9.4
160°-170°	290.5	6.1
170°-180°	100.2	2.1
0°-30°	440.4	9.2
0°-40°	708.5	14.9
0°-60°	1214.0	25.5
0°-90°	1522.3	32.0
90°-120°	703.1	14.8
90°-150°	2399.9	50.4
90°-180°	3240.0	68.0
0°-180°	4762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	7	12	16	19	3
95°	45	41	12	16	16	57
105°	230	233	233	233	232	244
115°	432	435	436	433	429	428
125°	614	619	619	616	614	548
135°	766	770	769	767	762	590
145°	888	889	889	890	885	555
155°	978	973	974	976	970	450
165°	1032	1027	1028	1032	1026	291
175°	1055	1051	1051	1057	1050	100
180°	1055	1055	1055	1055	1055	



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.4	10.7	11.0	11.3	11.5	11.6	11.8	12.0	12.1	12.3
90°	0.8	2.2	3.6	5.0	6.3	7.6	8.9	10.1	11.3	12.5	13.4
92.5°	12.0	11.1	10.1	9.1	8.2	8.2	9.3	10.4	11.4	12.5	13.4
95°	44.6	44.1	43.5	43.0	42.5	38.9	32.3	25.7	19.1	12.5	13.4
97.5°	93.1	94.0	94.9	95.9	96.8	90.8	77.7	64.6	51.5	38.5	33.6
100°	130.6	131.1	131.6	132.2	132.7	133.3	134.0	134.7	135.4	136.1	110.2
102.5°	168.8	169.4	170.1	170.7	171.4	171.9	172.4	172.8	173.2	173.6	168.7
105°	229.9	230.6	231.3	232.0	232.7	233.0	233.0	233.0	233.0	233.0	233.0
107.5°	293.4	293.4	293.4	293.4	293.4	293.6	293.9	294.3	294.6	295.0	295.0
110°	334.7	334.7	334.7	334.7	334.7	334.9	335.2	335.6	335.9	336.3	335.8



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	373.5	373.9	374.3	374.8	375.2	375.5	375.7	375.9	376.1	376.3	375.7
115°	431.7	432.6	433.4	434.3	435.2	435.7	435.9	436.0	436.2	436.4	435.7
117.5°	491.9	491.9	491.8	491.8	491.8	492.1	492.7	493.4	494.1	494.7	493.8
120°	529.4	529.3	529.1	528.9	528.7	528.9	529.4	530.0	530.5	531.0	530.7
122.5°	562.6	563.3	563.9	564.6	565.2	565.7	565.9	566.2	566.4	566.7	566.3
125°	613.9	615.1	616.3	617.6	618.8	619.4	619.4	619.4	619.4	619.4	618.7
127.5°	662.9	663.7	664.6	665.5	666.3	666.7	666.6	666.5	666.4	666.3	665.9
130°	692.9	693.8	694.6	695.5	696.4	696.9	697.1	697.2	697.4	697.6	697.1
132.5°	722.9	723.9	724.9	725.9	727.0	727.3	726.9	726.5	726.1	725.7	725.6
135°	765.6	766.7	767.7	768.8	769.8	770.1	769.8	769.4	769.1	768.8	768.4
137.5°	804.9	805.8	806.7	807.6	808.5	808.8	808.5	808.2	807.9	807.5	807.6
140°	830.5	830.9	831.2	831.6	831.9	832.0	831.8	831.7	831.5	831.3	831.7
142.5°	853.7	853.9	854.1	854.3	854.5	854.7	855.0	855.2	855.5	855.7	855.8
145°	887.6	888.0	888.3	888.7	889.0	889.2	889.2	889.2	889.2	889.2	889.4
147.5°	917.3	917.3	917.2	917.1	917.1	917.1	917.3	917.5	917.8	918.0	918.2
150°	936.1	935.8	935.4	935.1	934.7	934.7	935.1	935.4	935.8	936.1	936.5
152.5°	954.3	953.5	952.7	952.0	951.2	951.0	951.3	951.7	952.0	952.4	952.7
155°	977.6	976.5	975.5	974.4	973.4	973.0	973.4	973.7	974.1	974.4	974.9
157.5°	995.5	994.9	994.3	993.7	993.0	992.7	992.8	992.8	992.8	992.9	993.4
160°	1008.1	1007.0	1006.0	1004.9	1003.9	1003.5	1003.6	1003.8	1004.0	1004.1	1004.8
162.5°	1018.1	1017.0	1016.0	1014.9	1013.9	1013.5	1013.6	1013.8	1014.0	1014.2	1015.1
165°	1031.5	1030.5	1029.4	1028.4	1027.3	1026.9	1027.1	1027.3	1027.4	1027.6	1028.7
167.5°	1041.5	1040.5	1039.4	1038.3	1037.2	1036.8	1036.9	1037.1	1037.3	1037.5	1038.7
170°	1047.2	1045.9	1044.7	1043.5	1042.3	1041.8	1041.9	1042.1	1042.3	1042.5	1043.9
172.5°	1050.9	1049.7	1048.5	1047.3	1046.0	1045.6	1045.9	1046.2	1046.5	1046.8	1048.1
175°	1055.0	1053.9	1052.9	1051.9	1050.8	1050.4	1050.5	1050.7	1050.9	1051.1	1052.5
177.5°	1056.9	1056.0	1055.2	1054.4	1053.5	1053.2	1053.3	1053.4	1053.6	1053.7	1054.7
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	12.5	12.6	12.8	12.9	12.8	12.7	12.7	12.6
90°	14.3	15.1	16.0	16.7	17.2	17.7	18.2	18.8
92.5°	14.3	15.1	16.0	16.5	16.8	17.0	17.3	17.5
95°	14.3	15.1	16.0	16.4	16.4	16.4	16.4	16.4
97.5°	28.7	23.8	18.9	16.4	16.4	16.4	16.4	16.4
100°	84.3	58.4	32.5	19.2	18.5	17.8	17.1	16.4
102.5°	163.8	158.9	154.0	145.7	133.8	122.0	110.2	98.4
105°	233.0	233.0	233.0	233.0	232.8	232.6	232.4	232.3
107.5°	295.1	295.1	295.1	294.9	294.4	293.8	293.3	292.8
110°	335.2	334.7	334.2	334.0	334.2	334.4	334.5	334.7



TEST NUMBER: P333139

CATALOG NUMBER: S125DIP-S375D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	375.0	374.3	373.7	373.2	373.0	372.7	372.5	372.3
115°	435.0	434.3	433.6	432.7	431.7	430.6	429.6	428.6
117.5°	492.9	492.0	491.1	490.4	490.0	489.5	489.1	488.6
120°	530.3	530.0	529.6	529.0	528.1	527.3	526.4	525.5
122.5°	566.0	565.6	565.3	564.6	563.6	562.6	561.6	560.6
125°	618.0	617.3	616.6	616.0	615.5	614.9	614.4	613.9
127.5°	665.5	665.2	664.8	663.9	662.7	661.4	660.1	658.8
130°	696.5	696.0	695.5	694.8	693.9	693.1	692.2	691.3
132.5°	725.5	725.4	725.3	724.8	724.0	723.1	722.2	721.4
135°	768.1	767.7	767.4	766.7	765.6	764.6	763.5	762.5
137.5°	807.7	807.7	807.8	807.4	806.5	805.6	804.7	803.8
140°	832.0	832.4	832.7	832.4	831.3	830.3	829.2	828.2
142.5°	855.9	855.9	856.0	855.5	854.5	853.4	852.4	851.3
145°	889.5	889.7	889.9	889.4	888.4	887.4	886.3	885.3
147.5°	918.4	918.6	918.8	918.3	917.0	915.8	914.5	913.3
150°	936.8	937.2	937.5	937.0	935.6	934.2	932.8	931.4
152.5°	953.1	953.4	953.8	953.3	952.1	950.8	949.6	948.3
155°	975.5	976.0	976.5	976.1	974.7	973.3	971.9	970.5
157.5°	994.0	994.6	995.1	994.7	993.3	991.9	990.5	989.1
160°	1005.5	1006.2	1006.9	1006.6	1005.2	1003.8	1002.4	1001.0
162.5°	1016.1	1017.1	1018.0	1017.8	1016.2	1014.7	1013.2	1011.7
165°	1029.7	1030.7	1031.8	1031.6	1030.2	1028.8	1027.4	1026.0
167.5°	1040.0	1041.2	1042.5	1042.3	1040.7	1039.2	1037.6	1036.1
170°	1045.2	1046.6	1048.0	1047.9	1046.4	1044.8	1043.2	1041.7
172.5°	1049.3	1050.6	1051.9	1051.7	1050.1	1048.6	1047.0	1045.4
175°	1053.8	1055.2	1056.6	1056.5	1055.0	1053.4	1051.9	1050.3
177.5°	1055.7	1056.6	1057.6	1057.6	1056.4	1055.3	1054.2	1053.1
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0

(END OF REPORT)