

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: P333227

Luminaire Tested: **S125DIP-S850D810U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333227
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D810U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6087.2 lumens
Efficiency: N/A
Efficacy: 132.6 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: General Diffuse

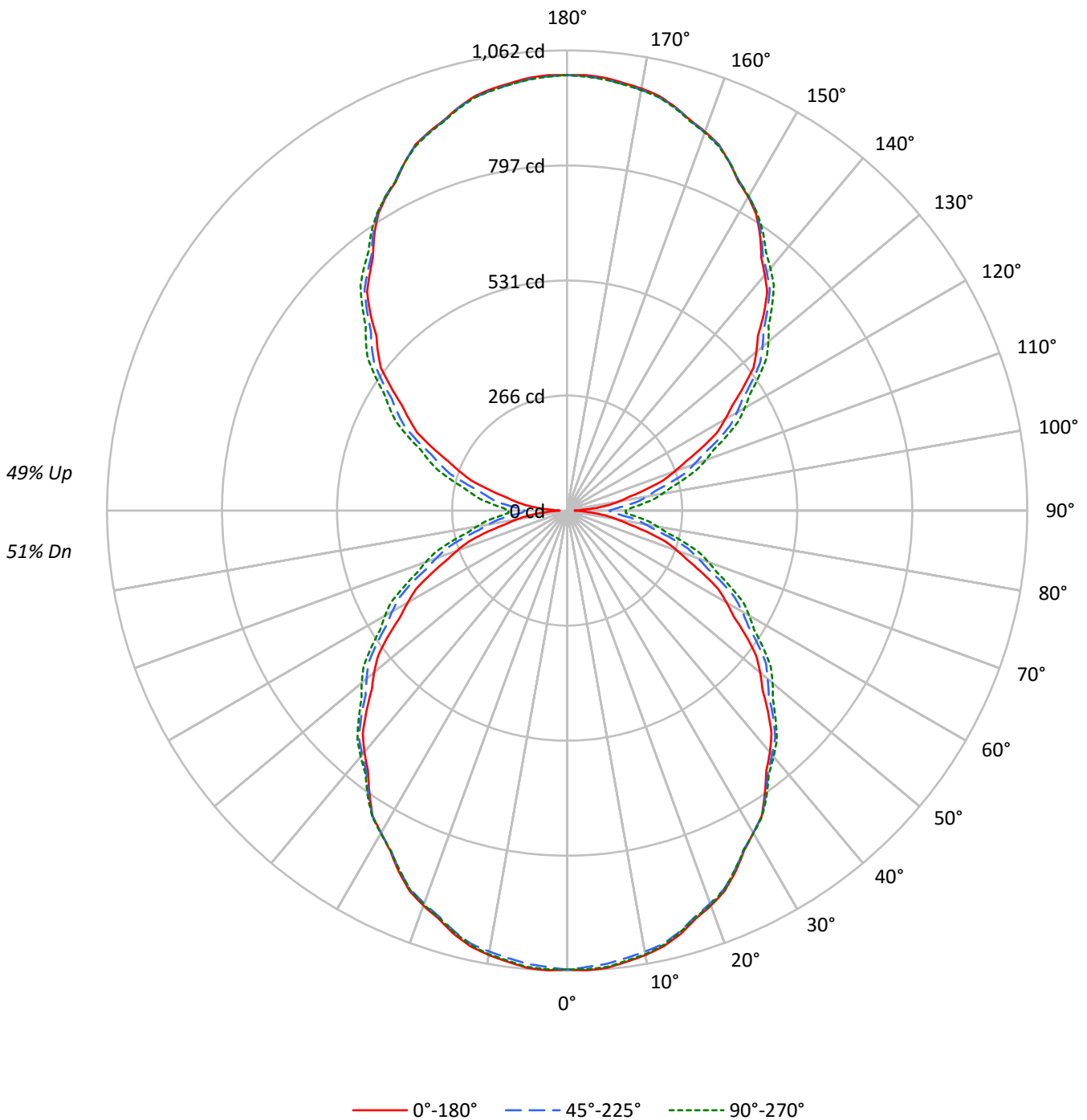
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333227

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Luminous Intensity Polar Plot





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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	50	30	10	50	30	10	0		
RCR																										
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51					51			
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41					41			
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	38	34					34			
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28					28			
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24					24			
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21					21			
6	62	49	41	35	57	46	39	33	39	33	29	33	28	25	27	24	21	18					18			
7	57	45	36	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16					16			
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14					14			
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13					13			
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.6
10°-20°	284.4	4.7
20°-30°	422.9	6.9
30°-40°	500.9	8.2
40°-50°	517.9	8.5
50°-60°	477.1	7.8
60°-70°	385.7	6.3
70°-80°	258.3	4.2
80°-90°	136.1	2.2
90°-100°	142.5	2.3
100°-110°	254.1	4.2
110°-120°	373.8	6.1
120°-130°	464.1	7.6
130°-140°	505.6	8.3
140°-150°	488.4	8.0
150°-160°	408.6	6.7
160°-170°	271.6	4.5
170°-180°	95.1	1.6
0°-30°	807.4	13.3
0°-40°	1308.3	21.5
0°-60°	2303.3	37.8
0°-90°	3083.4	50.7
90°-120°	770.4	12.7
90°-150°	2228.4	36.6
90°-180°	3004.0	49.3
0°-180°	6087.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	17	57	98	124	135	14
95°	64	94	136	163	173	65
105°	188	209	244	269	279	200
115°	343	355	382	399	406	339
125°	496	501	521	536	541	444
135°	642	646	653	666	669	494
145°	776	778	780	785	787	485
155°	887	887	888	890	887	408
165°	964	963	963	966	962	272
175°	1002	1000	999	1003	999	95
180°	1005	1005	1005	1005	1005	



TEST NUMBER: P333227

CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.6	40.2	47.9	55.5	63.2	71.1	79.2	87.3	95.4	103.5	108.9
90°	17.4	26.2	34.9	43.7	52.5	61.4	70.5	79.5	88.6	97.7	103.9
92.5°	33.9	41.7	49.5	57.3	65.1	73.8	83.3	92.8	102.3	111.9	118.1
95°	64.3	70.7	77.0	83.4	89.7	97.7	107.3	116.9	126.4	136.0	142.3
97.5°	96.7	102.2	107.8	113.3	118.9	126.6	136.6	146.6	156.5	166.5	172.5
100°	120.9	125.7	130.6	135.4	140.3	147.5	157.2	166.8	176.5	186.1	192.5
102.5°	147.0	152.1	157.3	162.5	167.7	174.4	182.8	191.1	199.5	207.8	214.2
105°	187.6	192.2	196.8	201.3	205.9	212.1	220.1	228.1	236.0	244.0	249.7
107.5°	232.7	236.7	240.7	244.7	248.7	254.4	261.9	269.3	276.8	284.2	289.3
110°	263.8	267.4	271.0	274.7	278.3	283.6	290.6	297.6	304.6	311.5	316.5



TEST NUMBER: P333227

CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.3	298.9	301.6	304.3	306.9	311.8	318.7	325.6	332.6	339.5	343.9
115°	343.3	345.6	347.9	350.2	352.5	356.8	363.2	369.5	375.9	382.2	386.2
117.5°	390.4	391.8	393.1	394.5	395.9	399.6	405.6	411.5	417.5	423.5	427.6
120°	420.4	422.0	423.5	425.1	426.7	430.2	435.7	441.1	446.6	452.1	456.0
122.5°	452.1	452.7	453.4	454.0	454.7	457.8	463.3	468.9	474.5	480.1	483.7
125°	496.0	496.8	497.6	498.4	499.3	502.1	506.8	511.6	516.4	521.2	524.6
127.5°	541.9	542.2	542.6	543.0	543.3	545.5	549.5	553.5	557.5	561.5	564.7
130°	570.0	570.7	571.3	571.9	572.6	574.7	578.3	581.9	585.4	589.0	592.1
132.5°	597.4	598.7	600.1	601.5	602.9	604.8	607.2	609.6	612.0	614.5	617.5
135°	641.7	642.5	643.3	644.2	645.0	646.3	648.1	649.8	651.6	653.4	656.4
137.5°	683.4	684.2	685.1	685.9	686.7	687.7	688.9	690.0	691.2	692.4	695.3
140°	709.5	710.4	711.2	712.1	713.0	713.8	714.5	715.3	716.0	716.8	719.7
142.5°	736.4	736.9	737.5	738.0	738.6	739.2	739.9	740.6	741.3	742.0	744.4
145°	776.0	776.4	776.9	777.3	777.8	778.3	778.8	779.3	779.9	780.4	781.5
147.5°	811.5	811.9	812.3	812.7	813.0	813.4	813.9	814.3	814.7	815.1	815.9
150°	835.9	835.7	835.6	835.4	835.2	835.5	836.2	836.9	837.6	838.3	838.3
152.5°	855.9	856.2	856.4	856.7	856.9	857.2	857.4	857.7	858.0	858.3	858.7
155°	886.7	886.7	886.7	886.7	886.7	886.8	887.0	887.2	887.3	887.5	888.2
157.5°	914.3	913.9	913.5	913.1	912.7	912.6	912.8	913.0	913.1	913.3	914.0
160°	930.5	930.0	929.5	929.0	928.4	928.3	928.4	928.6	928.8	929.0	929.7
162.5°	944.9	944.5	944.1	943.8	943.4	943.2	943.2	943.3	943.3	943.4	944.2
165°	964.2	963.8	963.5	963.1	962.8	962.7	962.8	963.0	963.2	963.4	964.1
167.5°	980.4	979.7	979.0	978.3	977.6	977.3	977.3	977.3	977.3	977.3	978.3
170°	989.2	988.5	987.8	987.1	986.4	986.0	986.0	986.0	986.0	986.0	987.1
172.5°	995.4	994.7	994.0	993.3	992.6	992.3	992.3	992.3	992.3	992.3	993.3
175°	1002.5	1001.8	1001.1	1000.4	999.7	999.3	999.3	999.3	999.3	999.3	1000.4
177.5°	1006.1	1005.5	1005.0	1004.4	1003.8	1003.5	1003.4	1003.2	1003.1	1002.9	1003.8
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8



TEST NUMBER: P333227

CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	114.4	119.9	125.4	129.0	130.7	132.4	134.1	135.9
90°	110.0	116.2	122.4	126.5	128.7	130.8	132.9	135.1
92.5°	124.4	130.7	136.9	141.1	143.1	145.1	147.1	149.1
95°	148.6	154.9	161.2	165.3	167.3	169.3	171.2	173.2
97.5°	178.5	184.5	190.5	194.3	196.1	197.9	199.7	201.5
100°	198.9	205.3	211.7	215.8	217.6	219.3	221.0	222.7
102.5°	220.5	226.9	233.3	237.4	239.3	241.1	243.0	244.9
105°	255.3	261.0	266.6	270.5	272.7	274.8	276.9	279.1
107.5°	294.4	299.5	304.6	307.8	309.2	310.6	312.0	313.4
110°	321.4	326.3	331.2	334.3	335.8	337.2	338.7	340.1



TEST NUMBER: P333227

CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	348.4	352.8	357.3	360.2	361.5	362.8	364.1	365.4
115°	390.2	394.2	398.1	400.7	401.9	403.2	404.4	405.6
117.5°	431.6	435.7	439.8	442.2	443.1	444.0	444.9	445.7
120°	460.0	463.9	467.8	470.1	470.8	471.5	472.2	472.9
122.5°	487.3	490.9	494.5	496.7	497.5	498.3	499.2	500.0
125°	527.9	531.2	534.6	536.8	537.7	538.7	539.7	540.7
127.5°	568.0	571.2	574.4	576.6	577.5	578.5	579.5	580.5
130°	595.1	598.2	601.2	603.2	604.0	604.8	605.6	606.4
132.5°	620.6	623.6	626.7	628.5	628.9	629.4	629.9	630.4
135°	659.4	662.4	665.4	667.2	667.6	668.1	668.5	669.0
137.5°	698.2	701.2	704.1	705.6	705.7	705.7	705.8	705.8
140°	722.6	725.4	728.3	729.8	729.9	729.9	730.0	730.0
142.5°	746.8	749.2	751.5	752.7	752.8	752.9	752.9	753.0
145°	782.7	783.9	785.0	785.8	786.2	786.6	787.0	787.4
147.5°	816.7	817.5	818.3	818.3	817.5	816.7	816.0	815.2
150°	838.3	838.3	838.3	838.2	838.1	838.0	837.8	837.7
152.5°	859.1	859.5	859.9	859.9	859.3	858.7	858.1	857.5
155°	888.9	889.6	890.3	890.2	889.3	888.5	887.6	886.7
157.5°	914.7	915.4	916.1	915.9	914.7	913.6	912.4	911.3
160°	930.4	931.0	931.7	931.7	930.8	929.9	929.0	928.2
162.5°	945.0	945.9	946.7	946.6	945.6	944.6	943.6	942.6
165°	964.8	965.5	966.1	966.0	964.9	963.9	962.8	961.8
167.5°	979.4	980.4	981.5	981.4	980.4	979.3	978.2	977.1
170°	988.1	989.2	990.2	990.1	988.9	987.7	986.5	985.3
172.5°	994.4	995.4	996.5	996.5	995.4	994.3	993.2	992.1
175°	1001.4	1002.5	1003.5	1003.4	1002.2	1001.0	999.8	998.6
177.5°	1004.6	1005.4	1006.3	1006.2	1005.2	1004.3	1003.3	1002.3
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8

(END OF REPORT)