

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: P333208

Luminaire Tested: **S125DIP-S850D365U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333208
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-S850D365U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4746.4 lumens
Efficiency: N/A
Efficacy: 135.6 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: Semi-Direct

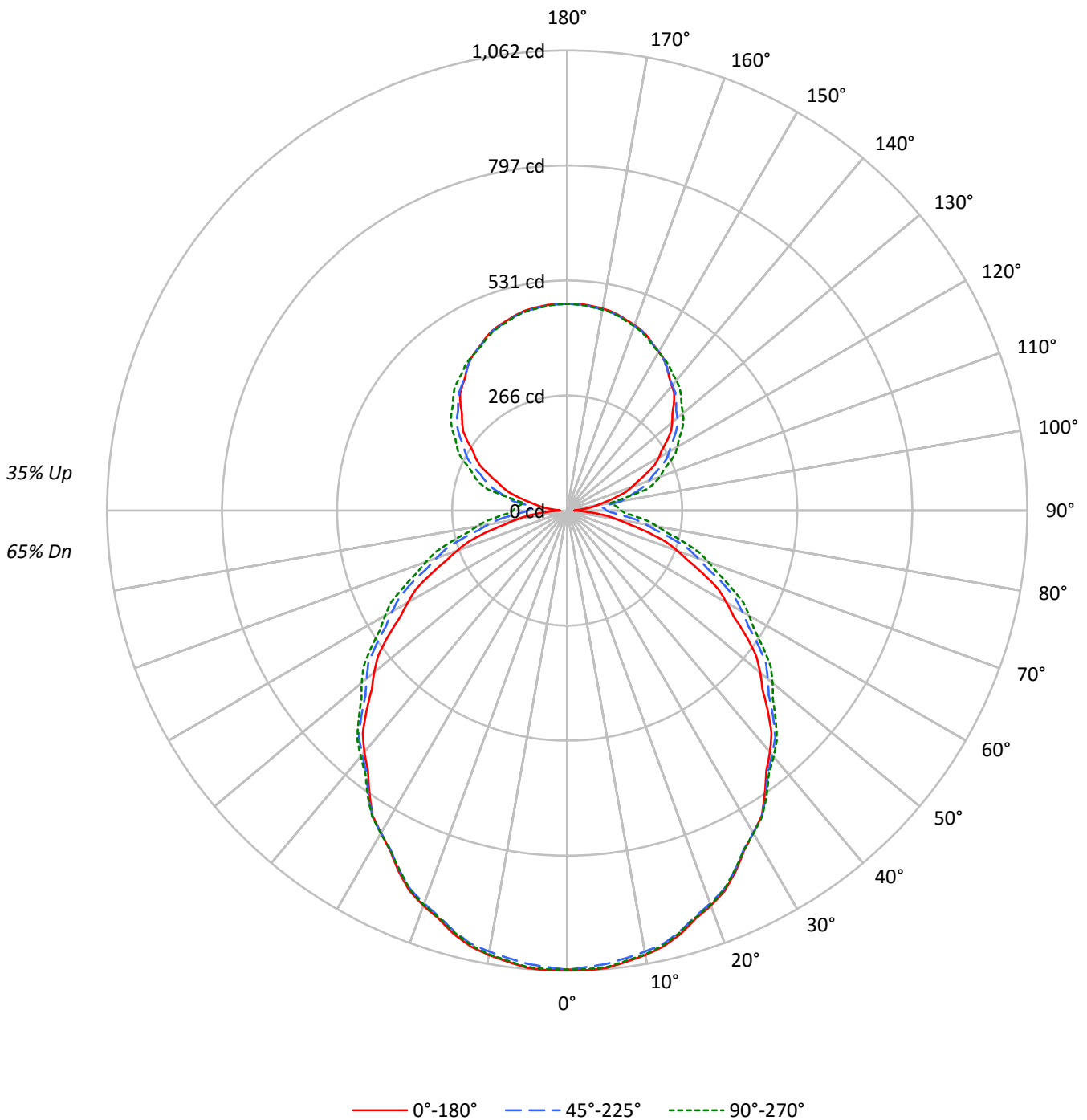
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333208

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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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	100	95	91	87	94	90	86	82	79	76	73	69	67	65	60	59	57	53
2	91	83	76	70	85	78	72	67	69	64	60	60	57	54	52	50	47	43
3	83	72	65	58	77	68	61	55	60	55	50	53	49	45	46	43	40	36
4	76	64	56	49	71	60	53	47	53	47	42	47	42	38	41	37	34	31
5	69	57	48	42	65	54	46	40	48	41	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	33	29	26	23
7	59	46	38	32	55	44	36	31	39	33	28	35	29	26	31	26	23	21
8	55	42	34	28	51	40	32	27	36	29	25	32	27	23	28	24	21	18
9	51	38	31	25	48	36	29	24	33	27	22	29	24	20	26	22	19	16
10	48	35	28	23	45	33	27	22	30	24	20	27	22	19	24	20	17	15

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	2.1
10°-20°	284.4	6.0
20°-30°	422.9	8.9
30°-40°	500.9	10.6
40°-50°	517.9	10.9
50°-60°	477.1	10.1
60°-70°	385.7	8.1
70°-80°	258.3	5.4
80°-90°	134.9	2.8
90°-100°	92.5	1.9
100°-110°	162.2	3.4
110°-120°	230.8	4.9
120°-130°	269.7	5.7
130°-140°	276.6	5.8
140°-150°	252.8	5.3
150°-160°	203.0	4.3
160°-170°	131.3	2.8
170°-180°	45.3	1.0
0°-30°	807.4	17.0
0°-40°	1308.3	27.6
0°-60°	2303.3	48.5
0°-90°	3082.2	64.9
90°-120°	485.5	10.2
90°-150°	1284.6	27.1
90°-180°	1664.0	35.1
0°-180°	4746.4	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	53	91	116	125	12
95°	34	59	82	105	113	36
105°	113	132	162	182	190	120
115°	201	211	238	254	259	200
125°	282	284	304	318	323	251
135°	348	350	356	368	372	268
145°	402	402	402	407	410	251
155°	442	440	440	441	439	203
165°	466	464	464	466	464	132
175°	477	475	475	478	475	45
180°	477	477	477	477	477	



TEST NUMBER: P333208

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D

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°	32.5	40.0	47.5	55.0	62.5	70.3	78.2	86.2	94.1	102.1	107.5
90°	17.0	25.0	33.0	41.0	49.0	57.2	65.6	74.0	82.4	90.8	96.5
92.5°	20.4	26.8	33.2	39.6	46.0	53.4	61.9	70.5	79.0	87.5	93.0
95°	33.6	39.4	45.2	50.9	56.7	62.0	66.9	71.7	76.6	81.5	86.9
97.5°	54.3	60.1	66.0	71.8	77.6	81.4	83.0	84.7	86.4	88.0	90.6
100°	70.5	75.5	80.6	85.7	90.8	97.2	104.9	112.6	120.3	128.0	121.1
102.5°	86.9	91.7	96.4	101.2	106.0	112.1	119.4	126.8	134.2	141.6	144.1
105°	113.3	117.3	121.3	125.3	129.3	134.8	141.7	148.6	155.5	162.5	167.1
107.5°	140.7	143.9	147.0	150.1	153.3	158.3	165.1	171.9	178.7	185.5	190.1
110°	158.6	161.3	164.1	166.9	169.6	174.3	181.0	187.6	194.2	200.8	205.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.1	178.5	180.9	183.3	185.7	190.1	196.5	202.8	209.2	215.6	219.5
115°	201.4	203.4	205.4	207.4	209.4	213.4	219.5	225.6	231.7	237.7	241.6
117.5°	227.5	228.6	229.6	230.7	231.7	235.2	241.2	247.2	253.2	259.1	262.6
120°	244.5	245.1	245.7	246.3	247.0	250.0	255.6	261.1	266.7	272.2	276.0
122.5°	258.7	259.3	259.9	260.5	261.1	264.1	269.3	274.5	279.8	285.0	288.6
125°	281.6	282.0	282.3	282.6	282.9	285.4	290.0	294.6	299.2	303.8	307.2
127.5°	302.7	302.9	303.1	303.2	303.4	305.3	309.1	312.8	316.5	320.3	323.5
130°	316.3	316.5	316.6	316.8	316.9	318.7	322.0	325.3	328.6	331.9	334.9
132.5°	329.0	329.5	329.9	330.3	330.7	332.0	334.4	336.7	339.0	341.3	344.5
135°	348.1	348.4	348.6	348.9	349.1	349.9	351.4	352.9	354.3	355.8	358.6
137.5°	365.7	365.9	366.1	366.3	366.6	367.0	367.6	368.3	368.9	369.6	372.3
140°	376.4	376.6	376.8	376.9	377.1	377.2	377.4	377.5	377.7	377.8	380.5
142.5°	386.9	386.8	386.7	386.6	386.5	386.6	386.7	386.9	387.0	387.2	389.4
145°	402.2	402.2	402.1	402.0	401.9	401.9	401.9	401.9	401.9	401.9	403.1
147.5°	414.6	414.6	414.6	414.5	414.5	414.5	414.6	414.7	414.8	414.9	415.4
150°	423.1	423.0	422.8	422.6	422.5	422.5	422.6	422.8	423.0	423.1	423.3
152.5°	431.3	431.0	430.6	430.3	429.9	429.8	430.0	430.2	430.3	430.5	430.6
155°	441.9	441.4	440.9	440.4	440.0	439.8	440.0	440.1	440.3	440.4	440.7
157.5°	450.0	449.7	449.4	449.1	448.9	448.7	448.7	448.8	448.8	448.8	449.0
160°	455.6	455.2	454.7	454.2	453.8	453.6	453.6	453.7	453.8	453.9	454.2
162.5°	460.2	459.7	459.2	458.7	458.3	458.1	458.2	458.2	458.3	458.4	458.8
165°	466.2	465.8	465.3	464.8	464.4	464.2	464.2	464.3	464.4	464.5	464.9
167.5°	470.8	470.3	469.8	469.3	468.8	468.6	468.7	468.8	468.9	468.9	469.5
170°	473.3	472.8	472.2	471.7	471.1	470.9	471.0	471.0	471.1	471.2	471.8
172.5°	475.0	474.5	473.9	473.4	472.8	472.6	472.7	472.9	473.0	473.2	473.7
175°	476.8	476.4	475.9	475.4	475.0	474.8	474.8	474.9	475.0	475.1	475.7
177.5°	477.7	477.3	476.9	476.6	476.2	476.0	476.1	476.2	476.2	476.3	476.7
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8



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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°	112.9	118.2	123.6	127.2	128.8	130.5	132.1	133.8
90°	102.2	107.9	113.6	117.4	119.2	121.1	123.0	124.8
92.5°	98.5	104.0	109.6	113.2	114.9	116.6	118.4	120.1
95°	92.4	97.9	103.4	106.9	108.5	110.1	111.7	113.4
97.5°	93.3	95.9	98.5	100.6	102.2	103.8	105.3	106.9
100°	114.3	107.4	100.5	97.6	98.7	99.8	100.9	101.9
102.5°	146.5	149.0	151.4	150.6	146.7	142.7	138.8	134.8
105°	171.7	176.3	180.9	184.0	185.5	187.1	188.6	190.1
107.5°	194.6	199.2	203.8	206.7	207.9	209.1	210.3	211.5
110°	209.1	213.3	217.4	220.3	222.0	223.7	225.4	227.1



TEST NUMBER: P333208

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	223.4	227.3	231.2	233.9	235.4	236.9	238.4	239.9
115°	245.4	249.3	253.1	255.5	256.4	257.3	258.2	259.1
117.5°	266.2	269.7	273.2	275.6	277.0	278.4	279.7	281.1
120°	279.7	283.5	287.3	289.7	290.6	291.6	292.6	293.6
122.5°	292.2	295.8	299.3	301.6	302.5	303.4	304.4	305.3
125°	310.6	314.0	317.4	319.5	320.4	321.3	322.3	323.2
127.5°	326.8	330.0	333.2	335.2	336.0	336.8	337.5	338.3
130°	337.9	340.9	343.9	345.8	346.5	347.3	348.1	348.8
132.5°	347.7	350.9	354.1	355.9	356.5	357.1	357.7	358.2
135°	361.5	364.3	367.2	368.9	369.6	370.3	371.0	371.6
137.5°	375.1	377.8	380.6	382.2	382.7	383.3	383.8	384.3
140°	383.2	385.9	388.6	390.2	390.6	391.1	391.5	392.0
142.5°	391.6	393.8	396.0	397.3	397.8	398.2	398.7	399.1
145°	404.4	405.6	406.8	407.7	408.1	408.6	409.0	409.5
147.5°	415.8	416.3	416.8	416.9	416.8	416.6	416.5	416.3
150°	423.4	423.6	423.7	423.6	423.2	422.8	422.4	422.0
152.5°	430.8	430.9	431.1	430.9	430.4	429.9	429.4	428.8
155°	440.9	441.1	441.4	441.2	440.6	439.9	439.3	438.7
157.5°	449.3	449.5	449.8	449.6	449.0	448.3	447.7	447.1
160°	454.5	454.8	455.1	455.0	454.3	453.7	453.1	452.5
162.5°	459.3	459.7	460.2	460.0	459.3	458.6	458.0	457.3
165°	465.4	465.9	466.4	466.3	465.7	465.0	464.4	463.8
167.5°	470.1	470.6	471.2	471.1	470.4	469.7	469.0	468.3
170°	472.4	473.1	473.7	473.7	473.0	472.3	471.5	470.8
172.5°	474.3	474.9	475.4	475.4	474.7	473.9	473.2	472.5
175°	476.3	477.0	477.6	477.6	476.8	476.1	475.4	474.7
177.5°	477.2	477.6	478.0	478.0	477.5	477.0	476.5	476.0
180°	476.8	476.8	476.8	476.8	476.8	476.8	476.8	476.8

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