

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: P333209-927

Luminaire Tested: **S125DIP-S850D365U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333209-927  
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-S850D365U927-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3604.0 lumens  
Efficiency: N/A  
Efficacy: 103.0 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

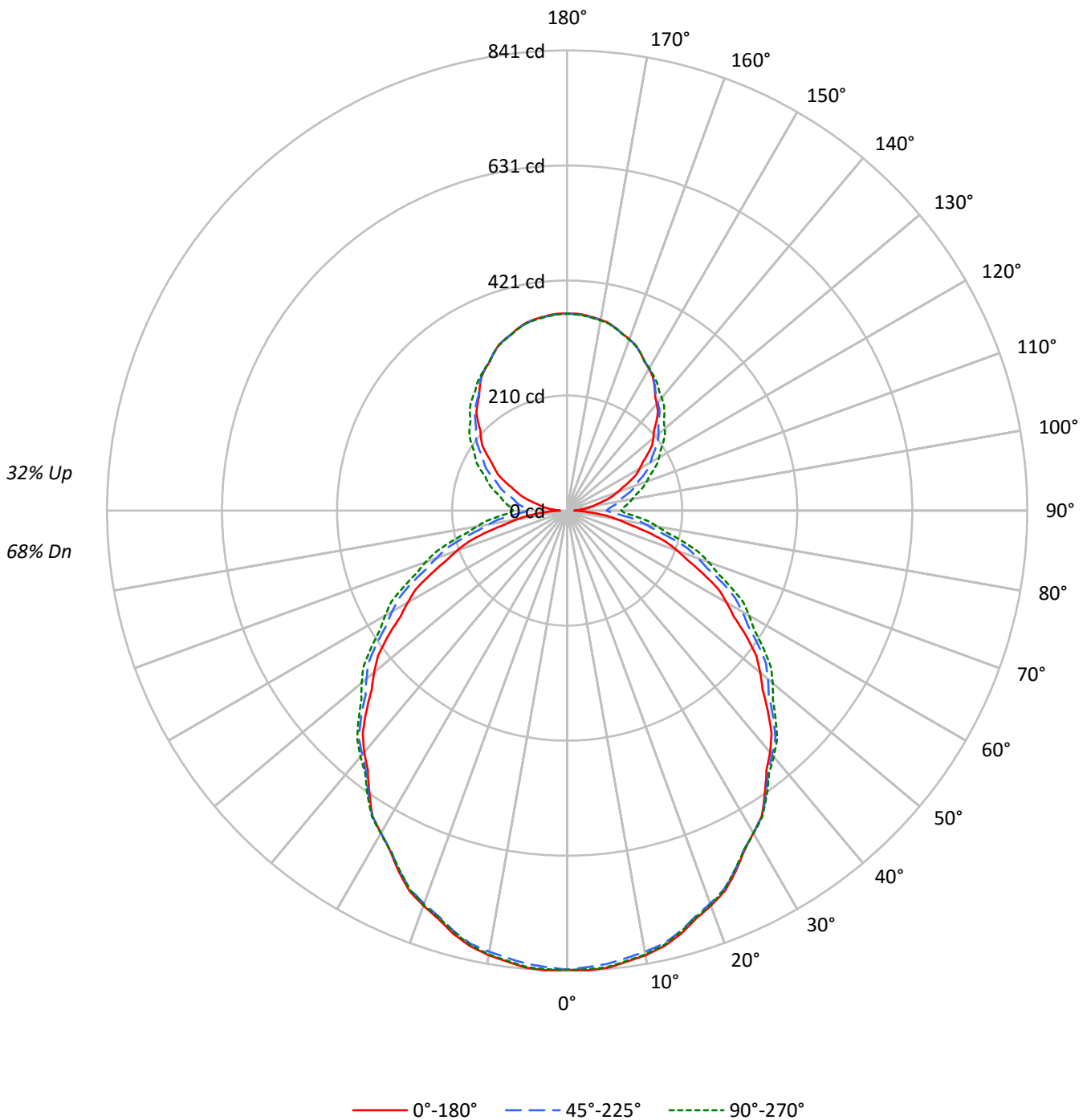
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	101	96	91	88	95	90	87	83	80	77	75	71	69	67	62	61	59	55
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	54	52	49	45
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	44	41	38
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	35	32
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19
9	51	39	31	25	48	37	30	25	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

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

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	2.2
10°-20°	225.3	6.3
20°-30°	335.0	9.3
30°-40°	396.8	11.0
40°-50°	410.3	11.4
50°-60°	377.9	10.5
60°-70°	305.5	8.5
70°-80°	204.6	5.7
80°-90°	106.9	3.0
90°-100°	83.6	2.3
100°-110°	115.1	3.2
110°-120°	149.9	4.2
120°-130°	175.3	4.9
130°-140°	185.0	5.1
140°-150°	175.7	4.9
150°-160°	146.3	4.1
160°-170°	97.3	2.7
170°-180°	34.0	0.9
0°-30°	639.6	17.7
0°-40°	1036.4	28.8
0°-60°	1824.7	50.6
0°-90°	2441.7	67.7
90°-120°	348.6	9.7
90°-150°	884.7	24.5
90°-180°	1162.0	32.2
0°-180°	3604.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	42	72	92	99	10
95°	29	51	82	101	108	28
105°	71	86	112	130	137	76
115°	126	133	154	168	174	124
125°	179	181	197	209	213	160
135°	231	232	238	248	251	178
145°	278	279	279	283	286	174
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.7	31.7	37.6	43.6	49.5	55.7	61.9	68.3	74.5	80.9	85.2
90°	13.5	19.8	26.1	32.5	38.8	45.3	52.0	58.6	65.3	71.9	76.4
92.5°	18.6	24.4	30.2	35.9	41.7	48.0	54.9	61.8	68.7	75.6	80.1
95°	28.9	33.7	38.7	43.5	48.4	54.3	61.1	68.0	74.8	81.6	86.1
97.5°	39.9	44.3	48.6	52.9	57.3	62.8	69.7	76.5	83.4	90.3	94.5
100°	48.2	52.1	55.9	59.7	63.6	68.8	75.5	82.1	88.8	95.5	99.9
102.5°	57.2	61.0	64.8	68.6	72.4	77.4	83.5	89.6	95.7	101.8	106.2
105°	71.2	74.5	77.7	81.0	84.2	88.7	94.6	100.4	106.3	112.2	116.2
107.5°	86.8	89.6	92.4	95.2	98.0	102.2	107.7	113.3	118.8	124.4	128.2
110°	97.6	100.1	102.6	105.1	107.6	111.5	116.8	122.2	127.5	132.8	136.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	109.2	111.1	113.0	115.0	116.9	120.5	125.7	130.9	136.1	141.3	144.7
115°	125.6	127.1	128.7	130.2	131.7	134.9	139.8	144.7	149.6	154.5	157.6
117.5°	142.0	143.0	143.9	144.9	145.8	148.6	153.2	157.9	162.5	167.1	170.2
120°	152.8	153.7	154.5	155.3	156.2	158.8	163.0	167.3	171.6	175.9	179.0
122.5°	163.7	164.1	164.5	164.9	165.2	167.5	171.7	176.0	180.2	184.4	187.4
125°	179.4	179.6	179.8	180.0	180.1	182.1	185.8	189.6	193.3	197.0	199.8
127.5°	195.4	195.4	195.4	195.4	195.5	197.0	200.1	203.2	206.3	209.4	212.0
130°	205.5	205.6	205.7	205.8	206.0	207.4	210.1	212.8	215.4	218.1	220.6
132.5°	214.9	215.4	215.8	216.3	216.7	218.0	219.9	221.9	223.9	225.8	228.3
135°	230.7	230.8	231.1	231.2	231.5	232.2	233.5	234.9	236.2	237.6	240.0
137.5°	245.5	245.7	246.0	246.1	246.4	246.8	247.6	248.3	249.1	249.9	252.2
140°	254.5	254.8	255.1	255.4	255.7	256.1	256.4	256.8	257.2	257.5	259.7
142.5°	264.1	264.3	264.4	264.5	264.6	264.7	265.1	265.3	265.6	265.9	267.7
145°	278.3	278.4	278.5	278.5	278.5	278.7	278.8	279.1	279.2	279.4	280.4
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.3
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	89.4	93.6	97.9	100.8	102.0	103.4	104.6	106.0
90°	81.0	85.5	90.0	93.0	94.4	95.9	97.4	98.9
92.5°	84.5	89.0	93.5	96.4	97.8	99.3	100.7	102.0
95°	90.5	95.0	99.4	102.3	103.8	105.2	106.6	108.0
97.5°	98.8	103.0	107.3	110.0	111.4	112.7	114.0	115.3
100°	104.3	108.7	113.1	115.9	117.1	118.4	119.5	120.8
102.5°	110.4	114.7	119.1	121.8	123.1	124.4	125.6	126.9
105°	120.3	124.3	128.3	131.0	132.5	134.0	135.5	136.9
107.5°	132.0	135.9	139.7	142.1	143.2	144.3	145.4	146.6
110°	140.1	143.7	147.4	149.8	151.1	152.3	153.4	154.7





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CATALOG NUMBER: S125DIP-S850D365U927-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	148.1	151.5	155.0	157.2	158.4	159.6	160.7	161.9
115°	160.9	164.1	167.4	169.5	170.6	171.6	172.6	173.6
117.5°	173.4	176.6	179.7	181.8	182.8	183.8	184.7	185.8
120°	182.0	185.2	188.3	190.3	191.2	191.9	192.8	193.7
122.5°	190.3	193.1	196.1	198.0	198.8	199.8	200.7	201.6
125°	202.6	205.4	208.2	210.0	210.9	211.8	212.5	213.4
127.5°	214.6	217.3	219.9	221.7	222.6	223.6	224.5	225.5
130°	223.1	225.6	228.1	229.7	230.5	231.3	232.1	232.9
132.5°	230.8	233.3	235.8	237.3	237.9	238.5	239.1	239.7
135°	242.3	244.7	247.1	248.6	249.3	249.9	250.6	251.3
137.5°	254.4	256.6	258.8	260.2	260.5	261.0	261.4	261.8
140°	261.8	264.0	266.1	267.4	267.8	268.2	268.6	269.0
142.5°	269.4	271.2	273.1	274.2	274.6	275.0	275.4	275.8
145°	281.2	282.2	283.1	283.8	284.4	284.9	285.4	286.0
147.5°	292.7	293.2	293.7	293.8	293.7	293.6	293.5	293.4
150°	300.2	300.2	300.2	300.2	300.2	300.3	300.3	300.4
152.5°	307.6	307.8	307.9	307.9	307.7	307.5	307.4	307.1
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

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