

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: P333164-927

Luminaire Tested: **S125DIP-S610D365U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333164-927  
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-S610D365U927-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 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: 2906.3 lumens  
Efficiency: N/A  
Efficacy: 105.7 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-Direct

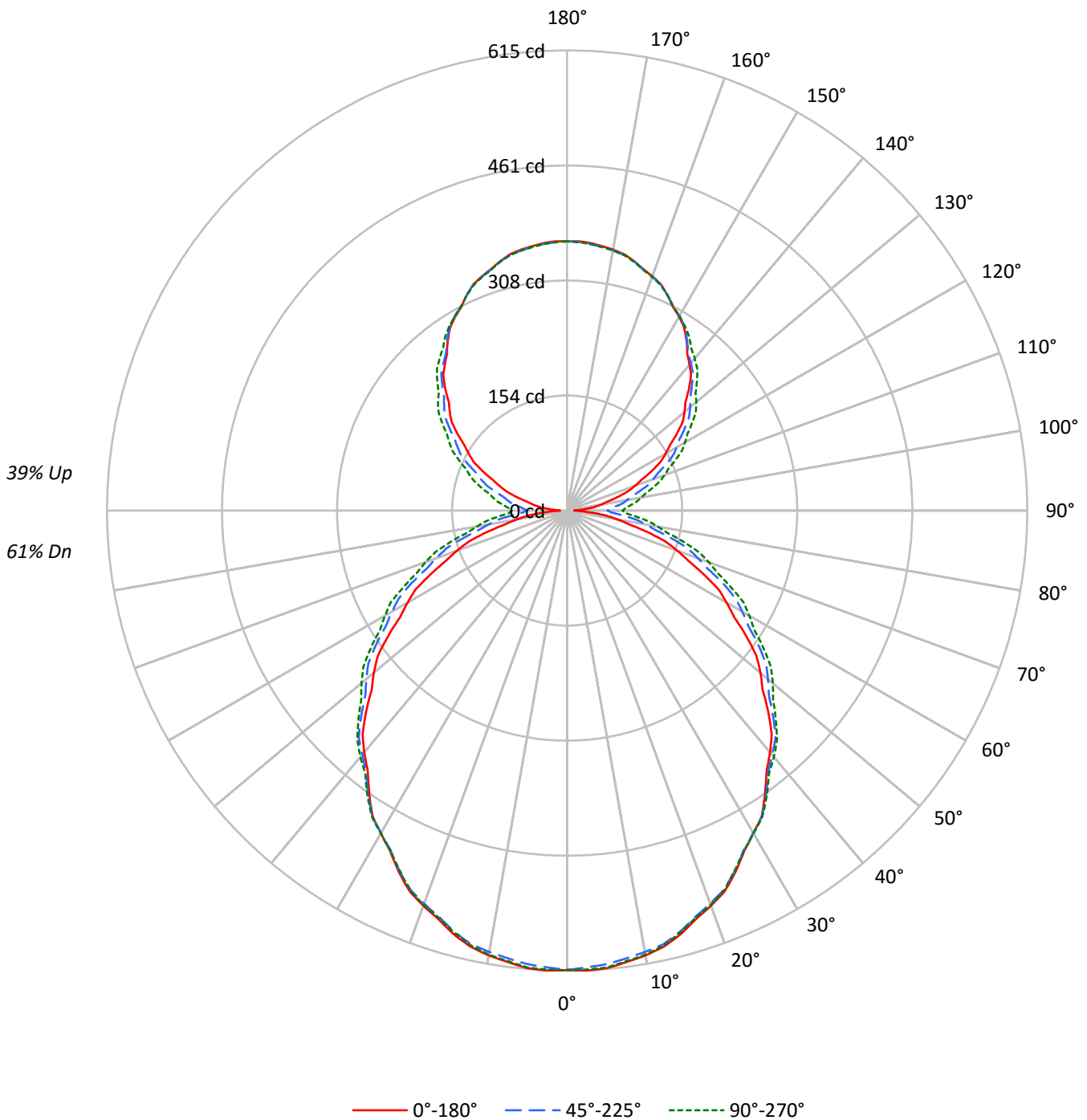
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	54	49	51	47	43	44	41	38	34
4	75	64	55	49	70	60	52	46	52	46	42	46	41	37	39	36	33	29
5	69	57	48	42	64	53	45	40	47	41	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	34	28	25	29	25	22	19
8	54	42	34	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	47	35	27	22	44	33	26	22	29	24	20	26	21	18	23	19	16	14

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

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	2.0
10°-20°	164.8	5.7
20°-30°	245.1	8.4
30°-40°	290.3	10.0
40°-50°	300.2	10.3
50°-60°	276.5	9.5
60°-70°	223.5	7.7
70°-80°	149.7	5.2
80°-90°	78.4	2.7
90°-100°	67.7	2.3
100°-110°	103.3	3.6
110°-120°	142.1	4.9
120°-130°	170.8	5.9
130°-140°	183.1	6.3
140°-150°	175.3	6.0
150°-160°	146.3	5.0
160°-170°	97.3	3.3
170°-180°	34.0	1.2
0°-30°	467.9	16.1
0°-40°	758.2	26.1
0°-60°	1334.9	45.9
0°-90°	1786.5	61.5
90°-120°	313.0	10.8
90°-150°	842.2	29.0
90°-180°	1120.0	38.5
0°-180°	2906.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	31	54	68	74	7
95°	26	43	66	80	86	26
105°	69	81	100	113	119	74
115°	124	130	146	156	160	123
125°	179	180	192	201	204	160
135°	230	232	236	243	246	177
145°	278	279	279	282	284	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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.2	27.6	32.0	36.4	40.9	45.5	50.1	54.7	59.4	62.5
90°	9.9	14.7	19.5	24.2	29.0	33.9	38.9	43.9	48.9	53.9	57.2
92.5°	15.4	19.7	24.1	28.4	32.6	37.4	42.6	47.8	53.0	58.1	61.6
95°	26.1	29.6	33.2	36.8	40.4	44.8	50.0	55.1	60.4	65.5	68.8
97.5°	37.3	40.6	43.7	46.9	50.1	54.3	59.5	64.8	70.0	75.3	78.5
100°	45.8	48.6	51.4	54.3	57.0	61.0	66.1	71.2	76.3	81.4	84.8
102.5°	55.0	57.8	60.7	63.5	66.3	70.0	74.6	79.2	83.8	88.4	91.7
105°	69.2	71.7	74.1	76.6	79.1	82.5	86.9	91.3	95.6	100.1	103.1
107.5°	85.1	87.2	89.4	91.5	93.6	96.7	100.9	105.0	109.2	113.3	116.1
110°	96.0	98.0	99.9	101.8	103.7	106.6	110.6	114.5	118.4	122.4	125.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	107.7	109.2	110.6	112.0	113.5	116.1	120.0	123.9	127.8	131.7	134.2
115°	124.3	125.5	126.7	127.9	129.0	131.4	135.0	138.6	142.2	145.8	148.1
117.5°	140.9	141.6	142.4	143.1	143.9	145.9	149.3	152.7	156.1	159.5	161.8
120°	151.7	152.4	153.1	153.8	154.6	156.5	159.6	162.7	165.9	169.1	171.3
122.5°	162.9	163.1	163.4	163.7	164.1	165.7	168.9	172.1	175.2	178.3	180.4
125°	178.6	178.8	179.0	179.3	179.5	180.9	183.7	186.5	189.2	191.9	193.9
127.5°	194.7	194.8	194.9	195.0	195.0	196.2	198.4	200.7	203.0	205.3	207.2
130°	204.8	204.9	205.2	205.3	205.5	206.6	208.6	210.6	212.6	214.6	216.4
132.5°	214.4	214.9	215.4	215.9	216.3	217.3	218.7	220.1	221.6	223.0	224.7
135°	230.2	230.4	230.7	230.9	231.2	231.8	232.8	233.8	234.8	235.8	237.6
137.5°	245.1	245.3	245.7	245.9	246.1	246.5	247.2	247.7	248.3	248.9	250.6
140°	254.3	254.6	254.9	255.2	255.5	255.8	256.2	256.5	256.8	257.1	258.7
142.5°	263.9	264.0	264.2	264.4	264.5	264.7	265.0	265.2	265.5	265.8	267.1
145°	278.1	278.2	278.3	278.5	278.5	278.7	278.8	279.1	279.2	279.4	280.1
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.2
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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	65.7	68.8	71.9	74.0	75.0	76.0	76.9	77.9
90°	60.6	64.0	67.4	69.6	70.7	71.9	73.0	74.1
92.5°	65.0	68.3	71.7	73.9	75.0	76.0	77.2	78.2
95°	72.2	75.7	79.0	81.2	82.3	83.3	84.4	85.5
97.5°	81.7	84.9	88.2	90.2	91.2	92.2	93.2	94.2
100°	88.1	91.5	94.8	97.0	97.9	98.9	99.7	100.7
102.5°	95.0	98.3	101.6	103.8	104.7	105.8	106.7	107.7
105°	106.2	109.2	112.3	114.3	115.4	116.5	117.6	118.8
107.5°	119.0	121.8	124.7	126.5	127.3	128.1	129.0	129.8
110°	127.9	130.6	133.2	135.1	135.9	136.8	137.7	138.6





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CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	136.7	139.2	141.7	143.4	144.3	145.0	145.8	146.7
115°	150.5	152.9	155.2	156.8	157.5	158.2	159.0	159.7
117.5°	164.1	166.5	168.8	170.3	171.0	171.6	172.3	172.9
120°	173.6	175.9	178.1	179.5	180.1	180.6	181.2	181.7
122.5°	182.5	184.7	186.7	188.1	188.7	189.3	189.9	190.5
125°	196.0	198.0	199.9	201.3	201.9	202.5	203.1	203.7
127.5°	209.1	211.0	212.9	214.2	214.9	215.6	216.2	216.8
130°	218.2	220.0	221.8	223.0	223.6	224.1	224.7	225.2
132.5°	226.6	228.4	230.2	231.3	231.7	232.1	232.4	232.8
135°	239.3	241.1	242.7	243.8	244.2	244.7	245.1	245.5
137.5°	252.2	253.9	255.6	256.5	256.7	256.9	257.1	257.4
140°	260.3	261.9	263.5	264.4	264.7	264.8	265.1	265.3
142.5°	268.5	269.8	271.1	271.9	272.1	272.4	272.6	272.7
145°	280.7	281.5	282.1	282.7	283.0	283.3	283.7	284.0
147.5°	292.6	292.9	293.3	293.4	293.2	293.0	292.9	292.7
150°	300.2	300.2	300.2	300.2	300.2	300.2	300.2	300.2
152.5°	307.6	307.8	307.9	307.9	307.7	307.5	307.3	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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