

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: P333118-840

Luminaire Tested: **S125DIP-S375D365U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333118-840  
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-S375D365U840-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 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: 2954.2 lumens  
Efficiency: N/A  
Efficacy: 145.5 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

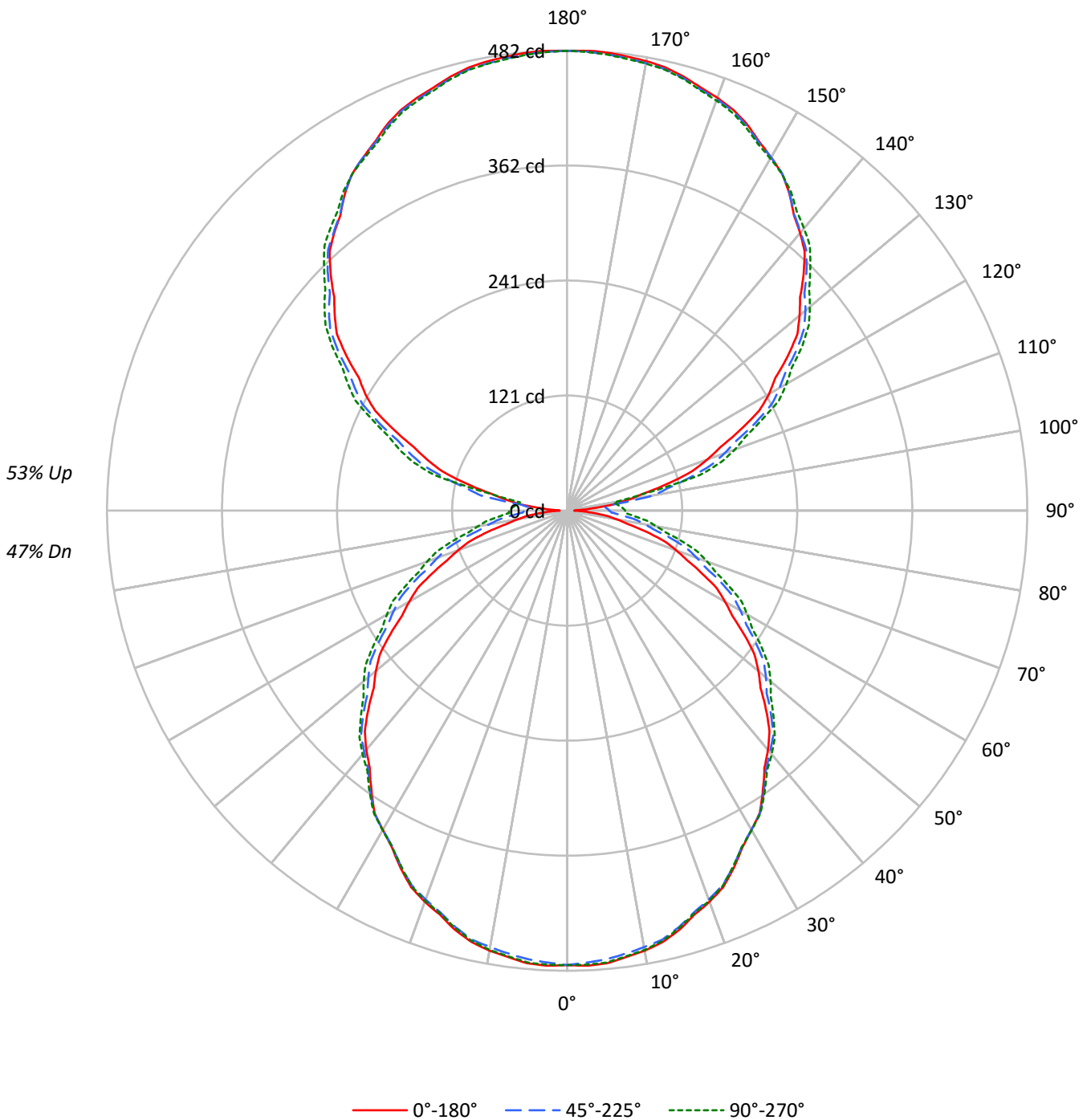
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333118-840

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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	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53	53	53	47
1	96	92	88	84	88	84	81	78	70	68	66		58	56	54		46	45	44	38
2	87	80	73	68	80	73	68	63	61	57	54		50	47	45		40	38	36	31
3	80	70	62	56	73	64	58	52	54	49	45		44	41	38		35	33	30	26
4	73	62	54	47	66	57	50	44	48	42	38		39	35	32		31	28	26	22
5	67	55	47	40	61	51	43	38	43	37	33		35	31	28		28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28		32	27	24		26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	24	21		23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22		26	22	19		21	18	16	13
9	49	37	29	24	45	34	27	22	29	23	20		24	20	17		20	16	14	12
10	46	33	26	21	42	31	25	20	27	21	18		22	18	15		18	15	13	11

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

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.0	1.5
10°-20°	127.8	4.3
20°-30°	190.0	6.4
30°-40°	225.1	7.6
40°-50°	232.7	7.9
50°-60°	214.4	7.3
60°-70°	173.3	5.9
70°-80°	116.1	3.9
80°-90°	61.2	2.1
90°-100°	51.3	1.7
100°-110°	132.8	4.5
110°-120°	212.3	7.2
120°-130°	260.5	8.8
130°-140°	274.1	9.3
140°-150°	254.3	8.6
150°-160°	205.0	6.9
160°-170°	132.6	4.5
170°-180°	45.7	1.5
0°-30°	362.8	12.3
0°-40°	587.9	19.9
0°-60°	1035.1	35.0
0°-90°	1385.6	46.9
90°-120°	396.3	13.4
90°-150°	1185.3	40.1
90°-180°	1569.0	53.1
0°-180°	2954.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	26	44	56	61	6
95°	26	37	40	51	55	31
105°	109	118	132	141	144	116
115°	200	205	217	224	225	198
125°	282	285	294	299	301	252
135°	350	352	355	360	360	270
145°	406	406	406	408	408	253
155°	446	444	445	446	443	206
165°	471	469	469	471	468	133
175°	482	480	480	482	479	46
180°	482	482	482	482	482	



TEST NUMBER: P333118-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.6	18.1	21.5	24.9	28.4	31.9	35.5	39.2	42.9	46.6	49.0
90°	7.8	11.8	15.8	19.7	23.6	27.7	31.7	35.9	39.9	44.0	46.8
92.5°	12.2	14.8	17.5	20.1	22.7	26.1	30.2	34.3	38.4	42.5	45.1
95°	26.5	28.9	31.3	33.8	36.3	37.8	38.3	38.8	39.3	39.8	42.4
97.5°	48.0	50.8	53.7	56.6	59.4	59.6	57.0	54.4	51.9	49.3	49.3
100°	64.7	67.2	69.6	72.0	74.4	77.5	81.1	84.7	88.4	92.0	82.3
102.5°	81.8	84.1	86.4	88.8	91.1	93.9	97.4	100.8	104.2	107.7	107.4
105°	109.2	111.1	113.1	115.1	117.0	119.6	122.7	125.8	129.0	132.1	134.1
107.5°	137.5	139.0	140.4	141.8	143.2	145.5	148.7	151.8	154.9	158.0	160.2
110°	156.0	157.3	158.5	159.8	161.1	163.2	166.2	169.4	172.4	175.4	177.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	173.8	174.9	176.1	177.3	178.5	180.6	183.5	186.4	189.3	192.2	193.8
115°	199.9	201.0	202.1	203.2	204.3	206.3	209.0	211.9	214.6	217.4	218.9
117.5°	226.9	227.3	227.8	228.2	228.7	230.4	233.2	236.1	238.9	241.8	243.2
120°	244.0	244.2	244.5	244.7	244.9	246.4	248.9	251.6	254.2	256.8	258.4
122.5°	258.7	259.2	259.6	260.1	260.5	262.0	264.4	266.8	269.2	271.7	273.2
125°	282.1	282.6	283.0	283.5	283.9	285.2	287.2	289.3	291.3	293.5	294.8
127.5°	304.0	304.3	304.6	304.9	305.2	306.1	307.8	309.4	311.0	312.8	314.1
130°	317.7	318.0	318.3	318.5	318.8	319.7	321.3	322.9	324.4	325.9	327.1
132.5°	331.0	331.4	331.8	332.3	332.8	333.5	334.4	335.4	336.3	337.2	338.6
135°	350.4	350.8	351.1	351.5	351.9	352.3	352.9	353.5	354.1	354.7	355.8
137.5°	368.2	368.6	368.9	369.2	369.5	369.8	370.0	370.2	370.4	370.6	371.9
140°	379.6	379.7	379.9	380.0	380.2	380.3	380.3	380.3	380.4	380.4	381.7
142.5°	390.1	390.1	390.1	390.2	390.2	390.2	390.4	390.5	390.6	390.8	391.8
145°	405.7	405.7	405.8	405.8	405.9	405.9	405.9	405.9	405.9	405.9	406.5
147.5°	418.7	418.7	418.7	418.6	418.6	418.6	418.7	418.8	418.9	419.0	419.3
150°	427.3	427.2	427.0	426.8	426.7	426.7	426.8	427.0	427.2	427.3	427.5
152.5°	435.6	435.3	434.8	434.5	434.1	434.0	434.2	434.4	434.5	434.7	434.8
155°	446.3	445.8	445.2	444.7	444.3	444.1	444.3	444.4	444.6	444.7	445.0
157.5°	454.4	454.1	453.8	453.5	453.3	453.1	453.1	453.2	453.2	453.2	453.4
160°	460.1	459.7	459.2	458.7	458.3	458.1	458.1	458.2	458.3	458.4	458.7
162.5°	464.7	464.2	463.7	463.2	462.8	462.6	462.7	462.7	462.8	462.9	463.3
165°	470.8	470.4	469.9	469.4	469.0	468.8	468.8	468.9	469.0	469.1	469.5
167.5°	475.4	474.9	474.4	473.9	473.4	473.2	473.3	473.4	473.5	473.5	474.1
170°	478.0	477.5	476.9	476.4	475.7	475.5	475.6	475.6	475.7	475.8	476.5
172.5°	479.7	479.2	478.6	478.1	477.5	477.3	477.4	477.6	477.7	477.9	478.4
175°	481.5	481.1	480.6	480.1	479.7	479.5	479.5	479.6	479.7	479.8	480.4
177.5°	482.4	482.0	481.6	481.3	480.9	480.7	480.8	480.9	480.9	481.0	481.4
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	51.4	53.9	56.4	58.0	58.8	59.6	60.3	61.1
90°	49.6	52.3	55.1	57.0	58.0	58.9	59.9	60.8
92.5°	47.9	50.6	53.3	55.0	55.8	56.8	57.6	58.4
95°	45.1	47.8	50.5	52.2	52.9	53.6	54.3	55.1
97.5°	49.2	49.1	49.1	49.4	50.1	50.8	51.5	52.2
100°	72.7	63.0	53.4	48.8	49.1	49.4	49.7	50.0
102.5°	107.3	107.2	107.0	104.6	99.9	95.0	90.3	85.5
105°	136.2	138.3	140.4	141.7	142.4	143.0	143.6	144.3
107.5°	162.2	164.3	166.3	167.6	168.0	168.4	168.8	169.3
110°	178.9	180.7	182.4	183.6	184.4	185.2	186.0	186.8





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CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	195.4	197.0	198.5	199.7	200.3	200.9	201.5	202.1
115°	220.5	222.1	223.6	224.4	224.6	224.7	224.9	225.0
117.5°	244.5	245.8	247.2	248.1	248.6	249.1	249.6	250.1
120°	260.0	261.7	263.3	264.2	264.4	264.7	264.9	265.1
122.5°	274.7	276.2	277.7	278.5	278.7	278.9	279.0	279.2
125°	296.1	297.5	298.8	299.6	299.9	300.2	300.4	300.7
127.5°	315.5	316.8	318.2	318.8	318.9	318.9	318.9	318.9
130°	328.3	329.5	330.7	331.4	331.5	331.6	331.7	331.9
132.5°	340.0	341.4	342.8	343.6	343.7	343.7	343.7	343.8
135°	357.0	358.2	359.4	360.0	360.0	360.1	360.1	360.2
137.5°	373.1	374.5	375.7	376.3	376.3	376.3	376.3	376.3
140°	383.0	384.3	385.6	386.2	386.2	386.1	386.1	386.0
142.5°	392.8	393.8	394.9	395.3	395.3	395.2	395.1	395.1
145°	407.1	407.7	408.3	408.5	408.5	408.4	408.4	408.3
147.5°	419.5	419.8	420.1	420.0	419.6	419.2	418.8	418.5
150°	427.6	427.8	427.9	427.8	427.2	426.7	426.2	425.7
152.5°	435.0	435.2	435.4	435.2	434.6	434.0	433.5	432.9
155°	445.2	445.5	445.8	445.6	444.9	444.2	443.6	443.0
157.5°	453.7	453.9	454.2	454.0	453.4	452.7	452.1	451.5
160°	459.0	459.3	459.6	459.5	458.8	458.2	457.6	457.0
162.5°	463.8	464.2	464.7	464.5	463.8	463.1	462.5	461.8
165°	470.0	470.5	471.0	470.9	470.3	469.6	469.0	468.4
167.5°	474.7	475.2	475.8	475.7	475.0	474.3	473.6	472.9
170°	477.1	477.8	478.4	478.4	477.7	477.0	476.2	475.4
172.5°	479.0	479.6	480.1	480.1	479.4	478.6	477.9	477.2
175°	481.0	481.7	482.3	482.3	481.5	480.8	480.1	479.4
177.5°	481.9	482.3	482.7	482.7	482.2	481.7	481.2	480.7
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5

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