

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: P333195-927

Luminaire Tested: **S125DIP-S610D1035U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333195-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S610D1035U927-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4923.4 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse

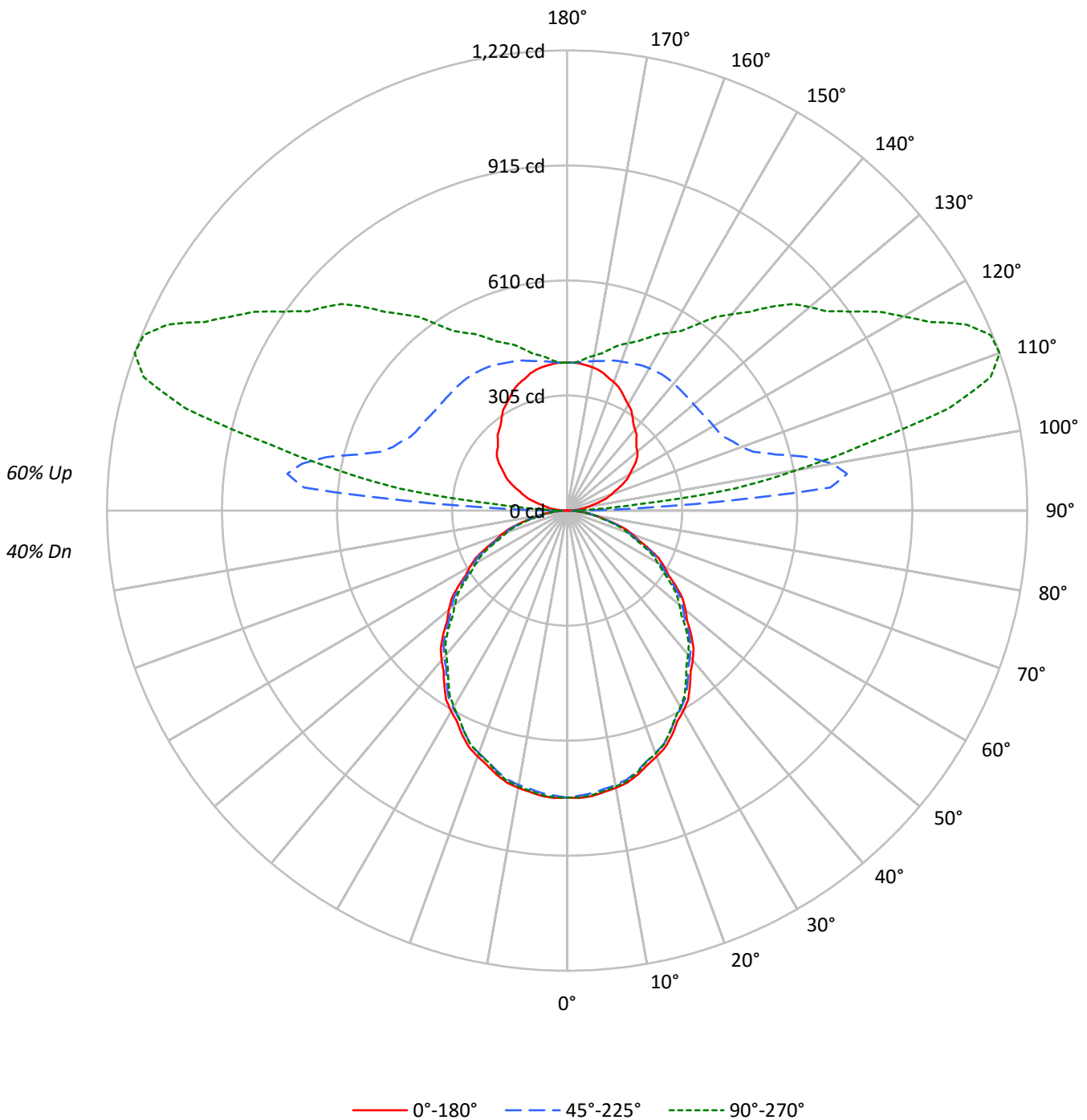
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	57	50	45	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	23	21	18
6	61	49	41	36	55	45	38	33	38	32	28	30	26	23	24	21	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	26	22	41	31	25	20	26	21	18	21	18	15	17	14	12	10

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

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.7	1.5
10°-20°	202.6	4.1
20°-30°	299.2	6.1
30°-40°	349.1	7.1
40°-50°	350.6	7.1
50°-60°	307.8	6.3
60°-70°	229.3	4.7
70°-80°	131.1	2.7
80°-90°	40.3	0.8
90°-100°	284.3	5.8
100°-110°	611.2	12.4
110°-120°	573.6	11.7
120°-130°	464.9	9.4
130°-140°	373.0	7.6
140°-150°	281.5	5.7
150°-160°	198.2	4.0
160°-170°	116.8	2.4
170°-180°	38.0	0.8
0°-30°	573.6	11.6
0°-40°	922.7	18.7
0°-60°	1581.1	32.1
0°-90°	1981.9	40.3
90°-120°	1469.1	29.8
90°-150°	2588.5	52.6
90°-180°	2941.0	59.7
0°-180°	4923.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	1	7	13	17	18	3
95°	26	77	701	318	186	28
105°	89	125	573	1129	1048	94
115°	160	193	460	992	1167	157
125°	221	259	441	789	920	196
135°	259	312	438	662	764	201
145°	302	346	440	548	603	189
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.2	13.3	13.6	13.9	14.3	14.5	14.6	14.8	14.8	15.1	15.2
90°	0.8	1.6	3.2	4.8	6.3	7.9	8.7	10.3	11.1	12.7	13.5
92.5°	9.7	11.7	18.4	28.1	41.7	64.9	108.1	180.5	259.0	254.9	206.4
95°	26.1	26.9	33.2	41.9	59.3	94.9	179.5	353.5	571.8	700.7	685.6
97.5°	43.3	44.3	48.7	57.4	73.0	98.7	154.7	282.2	510.6	748.3	867.5
100°	55.4	57.0	60.1	68.8	83.8	107.6	153.4	256.2	455.5	714.1	911.8
102.5°	68.7	69.6	72.1	81.4	95.2	118.3	159.1	245.5	413.8	654.0	885.3
105°	89.4	89.4	93.3	101.2	113.9	136.0	170.8	241.2	373.3	573.3	800.3
107.5°	109.6	111.2	114.9	121.4	134.6	154.6	188.2	248.5	356.2	517.8	713.6
110°	124.1	125.7	128.9	136.0	147.9	168.4	200.9	255.4	351.1	491.9	664.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	138.7	140.3	142.8	150.0	161.8	181.7	212.9	264.3	351.1	476.7	627.6
115°	159.8	161.3	163.7	170.8	182.7	202.5	231.7	277.6	353.5	460.3	587.6
117.5°	178.7	181.1	183.6	190.8	204.2	223.3	251.0	292.8	358.7	452.2	563.7
120°	191.4	193.8	196.9	204.1	217.5	237.3	264.9	302.9	363.8	448.4	550.4
122.5°	204.7	206.4	208.9	216.0	230.8	250.6	278.2	314.3	368.2	445.2	539.0
125°	221.4	223.0	227.0	234.1	249.1	269.7	295.8	329.8	375.7	441.2	523.6
127.5°	234.6	236.9	242.0	251.0	267.0	287.6	312.7	344.0	384.0	439.3	509.3
130°	242.8	245.2	251.5	261.7	278.4	298.9	323.4	353.5	389.1	438.1	499.8
132.5°	249.1	252.1	259.7	271.2	288.5	309.0	333.6	361.7	394.7	438.1	492.2
135°	259.4	262.5	272.0	284.7	301.3	322.7	347.1	373.3	402.5	438.1	483.2
137.5°	272.4	274.7	283.6	296.3	312.5	334.5	356.8	381.8	409.6	439.0	475.2
140°	280.0	282.3	291.8	304.4	319.5	340.9	363.8	387.5	412.8	439.7	471.3
142.5°	288.8	290.6	299.4	312.0	326.5	346.5	368.2	390.6	414.7	440.3	468.2
145°	302.1	303.6	311.6	322.7	336.9	355.1	375.7	395.4	416.8	439.7	463.4
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.5
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	15.4	15.5	15.7	15.9	15.7	15.4	15.4	15.2
90°	14.3	15.1	15.8	17.4	17.4	17.4	18.2	18.2
92.5°	140.1	101.7	76.5	64.9	54.7	52.8	51.7	50.5
95°	568.6	448.4	351.1	284.7	228.5	204.9	198.5	185.8
97.5°	846.8	762.5	667.7	575.4	526.6	482.2	459.3	449.2
100°	972.7	934.0	852.5	770.2	715.7	658.8	629.5	616.9
102.5°	1015.1	1038.9	999.9	944.2	885.9	845.4	813.6	804.1
105°	990.1	1098.4	1133.2	1124.5	1099.2	1073.2	1057.3	1047.8
107.5°	900.9	1045.4	1134.8	1176.1	1188.9	1188.7	1183.5	1177.2
110°	835.1	985.3	1096.9	1164.1	1199.7	1214.7	1220.2	1220.2





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CATALOG NUMBER: S125DIP-S610D1035U927-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	783.2	925.9	1038.6	1117.9	1169.9	1195.7	1209.5	1215.1
115°	718.0	840.7	949.0	1035.1	1096.9	1134.8	1157.0	1167.3
117.5°	676.0	781.6	875.0	954.0	1015.7	1054.9	1076.9	1083.2
120°	653.2	748.1	835.1	904.7	963.2	1001.2	1022.5	1028.9
122.5°	636.1	724.1	801.5	866.7	918.9	953.7	975.1	980.8
125°	611.3	692.0	760.7	817.7	862.0	894.4	911.8	919.7
127.5°	586.0	661.3	725.5	778.8	819.0	847.6	864.0	867.5
130°	570.2	639.8	701.5	752.9	792.4	818.5	834.3	839.1
132.5°	554.4	619.5	675.5	725.0	764.5	790.7	805.2	810.6
135°	533.8	588.4	639.0	684.0	718.8	745.0	759.1	763.9
137.5°	516.4	560.5	602.6	640.9	672.0	695.8	708.9	714.1
140°	506.9	544.1	580.4	613.7	642.9	663.5	675.3	679.3
142.5°	498.7	530.1	561.5	590.3	615.1	632.5	643.7	647.1
145°	487.9	512.5	536.9	558.3	577.3	590.7	599.4	602.6
147.5°	477.8	497.7	516.6	532.7	547.7	558.5	563.6	565.0
150°	472.1	489.5	504.5	518.8	530.6	540.1	543.3	544.1
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	526.8	527.6
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

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