

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: P333542-935

Luminaire Tested: **S125RDIP-S610D1035U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333542-935  
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: S125RDIP-S610D1035U935-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5130.8 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

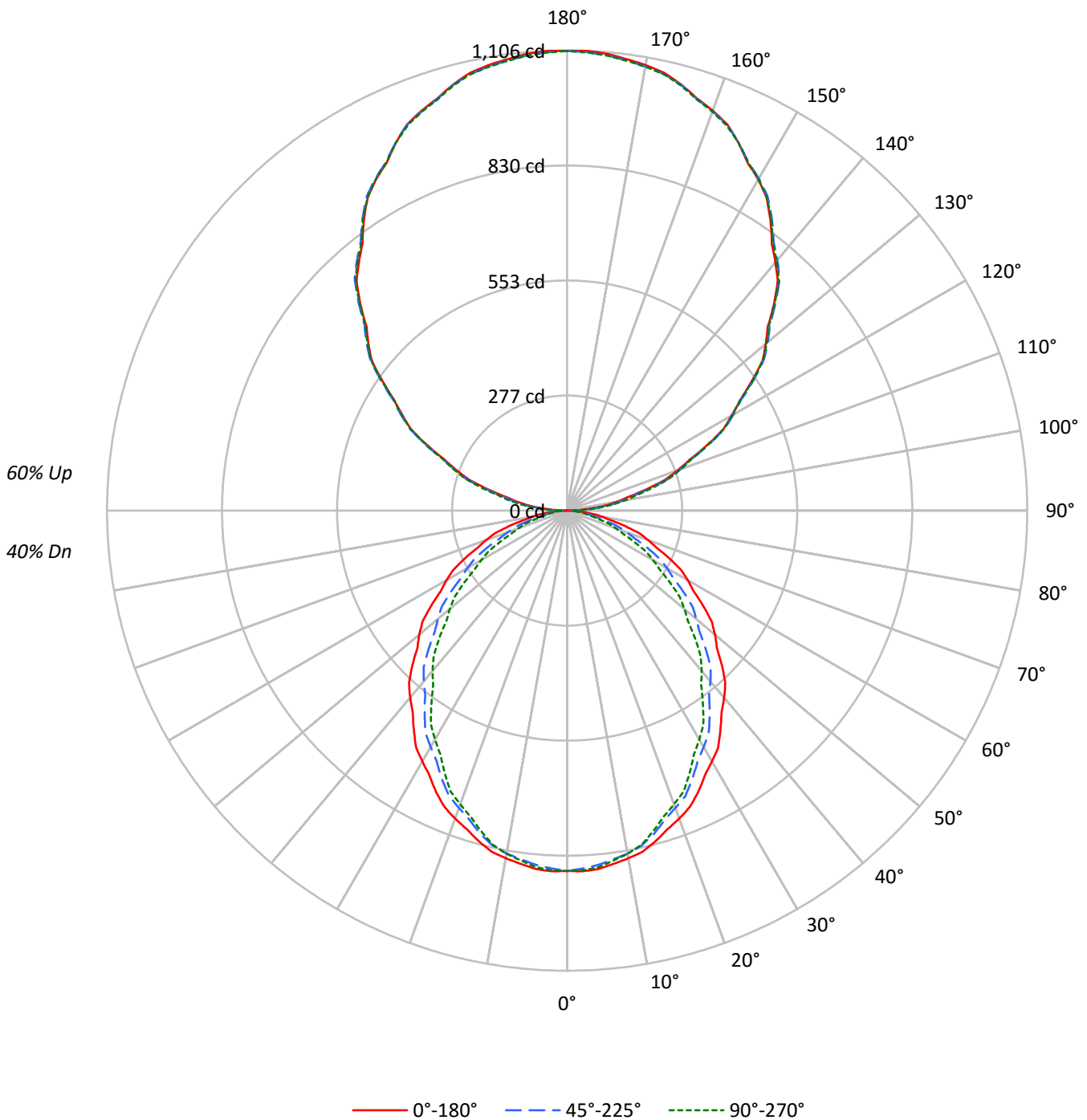
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	46	43	37	35	34	29
3	80	70	63	58	72	64	58	53	53	49	45	43	39	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	27	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	35	30	35	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	17	15	13	11

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

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	1.6
10°-20°	227.6	4.4
20°-30°	330.1	6.4
30°-40°	376.2	7.3
40°-50°	366.7	7.1
50°-60°	308.6	6.0
60°-70°	216.4	4.2
70°-80°	111.2	2.2
80°-90°	30.5	0.6
90°-100°	74.0	1.4
100°-110°	218.5	4.3
110°-120°	370.0	7.2
120°-130°	487.0	9.5
130°-140°	545.7	10.6
140°-150°	534.8	10.4
150°-160°	449.2	8.8
160°-170°	298.6	5.8
170°-180°	104.5	2.0
0°-30°	639.1	12.5
0°-40°	1015.3	19.8
0°-60°	1690.5	32.9
0°-90°	2048.6	39.9
90°-120°	662.5	12.9
90°-150°	2229.9	43.5
90°-180°	3082.0	60.1
0°-180°	5130.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	1	8	14	18	21	5
95°	56	58	66	72	74	60
105°	196	200	205	210	213	209
115°	370	374	376	375	374	366
125°	541	546	547	545	544	484
135°	703	708	709	709	706	542
145°	852	855	858	858	855	532
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.2	11.7	11.2	10.7	10.2	10.0	10.2	10.3	10.4	10.6	10.8
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	20.8	21.9	22.9	24.0	25.1	26.4	28.1	29.7	31.3	33.0	34.3
95°	55.9	56.2	56.7	57.0	57.4	58.5	60.4	62.3	64.3	66.2	67.5
97.5°	92.8	93.0	93.2	93.3	93.4	94.9	97.5	100.1	102.7	105.4	106.7
100°	120.4	120.4	120.4	120.4	120.4	121.6	124.1	126.6	129.1	131.5	133.2
102.5°	149.9	150.7	151.4	152.2	153.0	153.9	155.2	156.5	157.7	159.0	160.9
105°	196.0	196.9	197.9	198.9	199.8	200.9	202.0	203.1	204.3	205.4	206.6
107.5°	246.8	247.8	248.7	249.8	250.7	251.6	252.4	253.4	254.3	255.1	255.7
110°	282.0	282.9	283.9	284.8	285.8	286.5	287.1	287.7	288.3	288.8	289.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	317.7	318.2	318.7	319.2	319.7	320.3	321.1	321.8	322.4	323.2	323.5
115°	370.5	371.3	372.0	372.8	373.5	374.1	374.4	374.9	375.2	375.7	375.5
117.5°	423.4	423.8	424.1	424.5	424.8	425.2	425.5	425.9	426.2	426.5	426.7
120°	456.4	457.4	458.3	459.3	460.3	460.8	461.0	461.2	461.4	461.6	461.6
122.5°	492.2	492.6	492.9	493.3	493.6	494.0	494.5	495.0	495.5	495.9	495.8
125°	540.7	541.8	542.9	544.2	545.3	546.0	546.1	546.3	546.5	546.7	546.3
127.5°	592.3	592.9	593.6	594.2	594.9	595.3	595.6	595.7	596.0	596.2	596.0
130°	623.2	624.1	625.1	626.0	627.0	627.7	628.1	628.4	628.8	629.2	629.0
132.5°	654.1	655.7	657.3	658.8	660.4	661.2	661.1	661.0	660.9	660.8	660.6
135°	703.2	704.3	705.4	706.5	707.7	708.4	708.6	708.8	708.9	709.1	709.1
137.5°	749.2	750.3	751.4	752.5	753.6	754.4	754.8	755.3	755.7	756.0	756.3
140°	778.8	779.7	780.7	781.6	782.6	783.3	783.9	784.5	785.1	785.7	786.0
142.5°	808.3	809.2	809.9	810.7	811.6	812.4	813.0	813.8	814.5	815.2	815.5
145°	851.9	852.6	853.3	854.1	854.9	855.6	856.2	856.7	857.3	857.9	857.9
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.5
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	11.0	11.2	11.4	11.5	11.5	11.5	11.5	11.5
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	35.6	36.8	38.1	38.9	39.3	39.7	40.1	40.6
95°	68.9	70.2	71.5	72.4	72.8	73.2	73.5	74.0
97.5°	107.9	109.2	110.5	111.2	111.4	111.7	111.8	112.1
100°	134.9	136.6	138.4	139.5	139.8	140.2	140.6	140.9
102.5°	162.7	164.6	166.5	167.7	168.2	168.8	169.4	169.9
105°	207.8	208.9	210.0	210.9	211.5	212.1	212.6	213.2
107.5°	256.2	256.8	257.4	257.7	257.6	257.6	257.6	257.5
110°	290.0	290.5	291.1	291.3	291.1	290.9	290.8	290.5





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CATALOG NUMBER: S125RDIP-S610D1035U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	323.7	324.0	324.3	324.3	323.9	323.6	323.2	322.9
115°	375.2	375.1	374.9	374.7	374.4	374.3	374.1	373.9
117.5°	426.8	427.0	427.1	426.8	426.0	425.3	424.6	423.8
120°	461.6	461.6	461.6	461.2	460.5	459.7	458.9	458.1
122.5°	495.7	495.5	495.3	495.0	494.4	493.8	493.2	492.6
125°	546.0	545.5	545.2	544.8	544.7	544.5	544.3	544.2
127.5°	595.8	595.6	595.5	595.1	594.8	594.3	594.0	593.7
130°	628.8	628.6	628.4	628.2	627.8	627.4	627.0	626.6
132.5°	660.5	660.3	660.0	659.7	659.2	658.7	658.1	657.5
135°	709.1	709.1	709.1	708.8	708.0	707.2	706.5	705.7
137.5°	756.6	756.7	757.0	756.6	755.7	754.8	753.8	752.9
140°	786.4	786.8	787.2	786.9	785.9	785.0	784.0	783.1
142.5°	815.7	815.9	816.1	815.8	814.9	813.9	813.0	811.9
145°	857.9	857.9	857.9	857.6	857.0	856.4	855.8	855.3
147.5°	896.9	897.4	897.9	897.4	896.1	894.8	893.5	892.3
150°	921.4	921.4	921.4	921.3	920.9	920.5	920.2	919.7
152.5°	944.4	944.9	945.3	945.2	944.5	943.8	943.1	942.5
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)