

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: P333158-935

Luminaire Tested: **S125DIP-S375D1205U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333158-935  
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: S125DIP-S375D1205U935-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4899.2 lumens  
Efficiency: N/A  
Efficacy: 116.1 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: Semi-Indirect

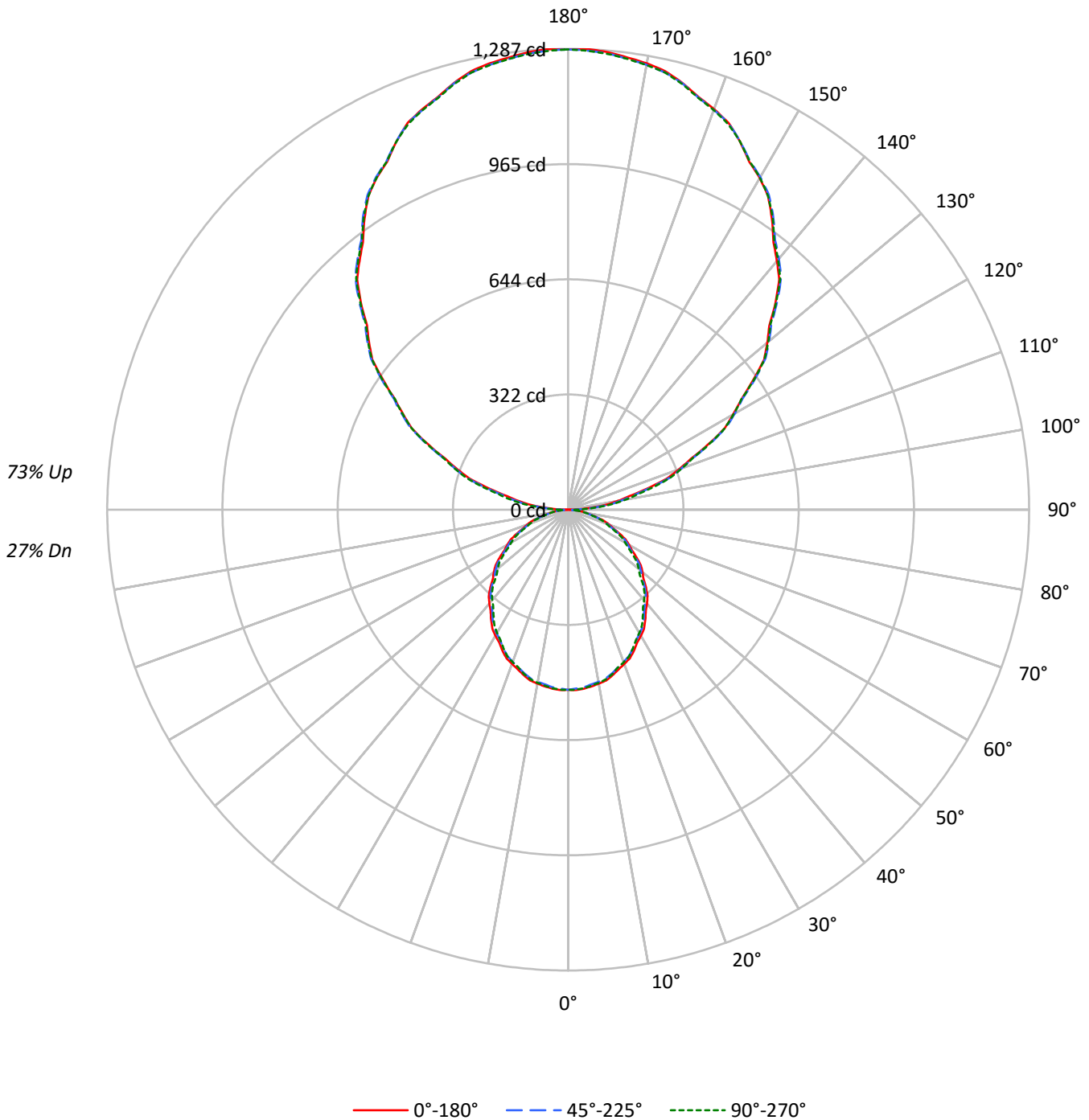
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	93	88	85	81	82	79	76	73	62	59	57	45	44	43	31	30	29	22
2	84	77	71	66	75	69	64	60	54	50	48	40	38	36	27	26	25	19
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	24	22	21	16
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	19	18	14
5	64	53	45	40	57	48	41	36	37	33	29	28	25	22	19	17	16	12
6	59	47	40	34	53	43	36	31	34	29	25	25	22	19	17	15	14	10
7	54	43	35	30	48	38	32	27	30	26	22	23	20	17	16	14	12	9
8	50	39	31	26	45	35	28	24	28	23	19	21	18	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	21	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	19	15	18	14	12	12	10	9	7

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

	0°	45°	90°
0°	3249	3249	3249
5°	3255	3225	3245
10°	3236	3202	3220
15°	3201	3163	3177
20°	3151	3110	3115
25°	3096	3046	3043
30°	3030	2976	2961
35°	2958	2902	2861
40°	2885	2822	2780
45°	2806	2747	2693
50°	2719	2659	2579
55°	2634	2558	2486
60°	2533	2457	2370
65°	2415	2335	2257
70°	2298	2194	2119
75°	2094	2026	1956
80°	1863	1834	1789
85°	1623	1652	1564



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	1.0
10°-20°	134.0	2.7
20°-30°	197.8	4.0
30°-40°	230.8	4.7
40°-50°	231.8	4.7
50°-60°	203.5	4.2
60°-70°	151.6	3.1
70°-80°	86.7	1.8
80°-90°	28.0	0.6
90°-100°	86.1	1.8
100°-110°	254.3	5.2
110°-120°	430.7	8.8
120°-130°	566.8	11.6
130°-140°	635.1	13.0
140°-150°	622.5	12.7
150°-160°	522.8	10.7
160°-170°	347.5	7.1
170°-180°	121.6	2.5
0°-30°	379.2	7.7
0°-40°	610.0	12.5
0°-60°	1045.3	21.3
0°-90°	1311.6	26.8
90°-120°	771.1	15.7
90°-150°	2595.6	53.0
90°-180°	3588.0	73.2
0°-180°	4899.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	497	501	501	48
15°	479	477	473	475	475	135
25°	434	432	427	428	427	200
35°	375	373	368	366	363	235
45°	307	305	301	296	295	237
55°	234	232	227	224	221	209
65°	158	157	153	149	148	157
75°	84	83	81	80	78	89
85°	22	22	22	22	21	24
90°	1	9	16	21	24	5
95°	65	67	77	84	86	69
105°	228	233	239	245	248	244
115°	431	435	437	436	435	426
125°	629	635	636	634	633	563
135°	818	824	825	825	821	631
145°	992	995	998	998	996	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	504.2	504.0	503.9	503.6	503.4	502.9	502.2	501.5	500.8	500.1	500.8
5°	502.1	502.0	501.8	501.6	501.4	500.9	500.1	499.2	498.3	497.4	498.2
7.5°	497.6	497.4	497.2	497.1	496.9	496.3	495.3	494.3	493.4	492.4	493.2
10°	493.4	493.3	493.1	492.9	492.8	492.1	491.2	490.2	489.2	488.3	489.0
12.5°	488.4	488.0	487.7	487.4	487.1	486.5	485.5	484.7	483.7	482.8	483.4
15°	478.7	478.5	478.2	477.9	477.6	477.0	476.0	475.1	474.1	473.1	473.6
17.5°	467.6	467.3	466.8	466.5	466.1	465.4	464.3	463.4	462.4	461.3	461.9
20°	458.4	458.2	458.1	457.9	457.7	457.0	455.9	454.7	453.6	452.5	453.1
22.5°	449.2	448.8	448.5	448.2	447.9	447.2	446.1	445.1	443.9	442.9	443.3
25°	434.5	434.1	433.6	433.2	432.7	432.0	430.8	429.6	428.5	427.4	427.6
27.5°	417.4	417.2	416.9	416.6	416.4	415.6	414.5	413.3	412.1	410.9	411.0
30°	406.3	406.0	405.7	405.4	405.2	404.4	403.1	401.7	400.5	399.1	398.9
32.5°	394.2	393.7	393.4	393.0	392.5	391.8	390.5	389.3	388.2	387.0	386.7
35°	375.2	374.9	374.5	374.2	373.8	373.0	371.8	370.6	369.3	368.1	367.6
37.5°	355.6	355.2	354.7	354.2	353.8	353.0	351.8	350.7	349.5	348.4	347.7
40°	342.2	341.7	341.3	340.9	340.4	339.6	338.4	337.2	335.9	334.7	333.9
42.5°	327.9	327.5	327.2	326.7	326.4	325.6	324.3	323.1	321.8	320.6	319.9
45°	307.2	306.9	306.5	306.2	305.7	305.1	304.0	303.0	301.9	300.8	299.8
47.5°	284.9	284.9	284.9	285.0	285.0	284.4	283.1	281.8	280.5	279.2	278.2
50°	270.6	270.4	270.1	269.8	269.5	268.9	267.8	266.7	265.7	264.6	263.5
52.5°	256.0	255.7	255.5	255.4	255.2	254.5	253.4	252.3	251.1	249.9	249.0
55°	233.9	233.7	233.4	233.2	232.9	232.1	230.9	229.7	228.4	227.2	226.4
57.5°	210.9	210.7	210.5	210.4	210.3	209.7	208.6	207.6	206.6	205.5	204.5
60°	196.1	195.8	195.4	195.1	194.8	194.1	193.1	192.2	191.1	190.2	189.3
62.5°	180.9	180.6	180.3	180.0	179.8	179.2	178.4	177.5	176.7	175.9	175.0
65°	158.0	157.8	157.6	157.5	157.3	156.7	155.8	154.7	153.8	152.8	152.0
67.5°	135.8	135.4	135.0	134.7	134.3	133.7	133.0	132.2	131.6	130.9	130.2
70°	121.7	121.3	120.9	120.5	120.0	119.3	118.6	117.8	117.0	116.2	115.6
72.5°	106.5	106.2	105.9	105.6	105.3	104.9	104.4	103.8	103.3	102.8	102.2
75°	83.9	83.8	83.6	83.4	83.3	82.9	82.5	82.1	81.6	81.2	80.9
77.5°	63.2	63.1	63.0	62.9	62.9	62.8	62.5	62.3	62.0	61.7	61.6
80°	50.1	50.1	50.1	50.1	50.1	50.0	49.9	49.7	49.5	49.3	49.2
82.5°	38.7	38.6	38.4	38.2	38.1	38.1	38.0	38.0	37.9	37.9	37.7
85°	21.9	22.0	22.0	22.1	22.2	22.3	22.3	22.3	22.3	22.3	22.2
87.5°	8.8	9.1	9.5	9.9	10.2	10.5	10.8	11.0	11.3	11.5	11.7
90°	1.0	2.8	4.6	6.4	8.1	9.8	11.4	12.9	14.5	16.0	17.1
92.5°	24.2	25.5	26.7	28.0	29.2	30.7	32.7	34.6	36.5	38.4	39.9
95°	65.0	65.4	66.0	66.4	66.8	68.1	70.3	72.6	74.8	77.1	78.6
97.5°	108.1	108.2	108.4	108.6	108.7	110.4	113.5	116.5	119.6	122.7	124.2
100°	140.1	140.1	140.1	140.1	140.1	141.5	144.4	147.3	150.2	153.1	155.1
102.5°	174.5	175.4	176.2	177.2	178.1	179.3	180.7	182.2	183.7	185.1	187.3
105°	228.1	229.2	230.3	231.4	232.6	233.8	235.1	236.4	237.8	239.1	240.5
107.5°	287.3	288.4	289.6	290.7	291.8	292.8	293.9	294.9	295.9	297.0	297.6
110°	328.2	329.2	330.4	331.5	332.6	333.5	334.2	334.8	335.5	336.1	336.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.8	370.4	370.9	371.5	372.1	372.8	373.7	374.5	375.3	376.2	376.5
115°	431.2	432.1	433.0	433.9	434.8	435.4	435.9	436.4	436.8	437.2	437.0
117.5°	492.8	493.3	493.7	494.0	494.5	494.8	495.2	495.7	496.0	496.5	496.6
120°	531.2	532.4	533.5	534.6	535.7	536.4	536.6	536.8	537.1	537.3	537.3
122.5°	572.9	573.3	573.7	574.1	574.5	575.0	575.6	576.2	576.7	577.3	577.1
125°	629.3	630.7	632.0	633.4	634.6	635.4	635.7	635.8	636.1	636.4	635.8
127.5°	689.4	690.1	690.9	691.6	692.4	692.9	693.2	693.4	693.7	694.0	693.7
130°	725.4	726.5	727.6	728.8	729.8	730.6	731.1	731.5	731.9	732.4	732.2
132.5°	761.4	763.2	765.1	766.9	768.7	769.6	769.5	769.4	769.3	769.2	769.0
135°	818.5	819.8	821.1	822.4	823.8	824.6	824.8	825.0	825.2	825.4	825.4
137.5°	872.0	873.3	874.6	875.9	877.2	878.1	878.6	879.1	879.6	880.0	880.3
140°	906.5	907.6	908.7	909.8	910.9	911.8	912.5	913.2	913.8	914.5	914.9
142.5°	940.9	941.8	942.8	943.7	944.6	945.6	946.3	947.2	948.0	948.9	949.2
145°	991.5	992.4	993.3	994.2	995.1	995.8	996.5	997.2	997.8	998.5	998.5
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.4
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	501.5	502.2	502.9	503.3	503.2	503.1	503.1	503.0
5°	498.9	499.8	500.6	500.9	500.8	500.8	500.7	500.6
7.5°	494.0	494.7	495.5	495.8	495.8	495.7	495.6	495.5
10°	489.7	490.3	491.1	491.4	491.3	491.2	491.1	491.0
12.5°	484.0	484.6	485.1	485.3	485.3	485.3	485.3	485.3
15°	474.0	474.4	474.9	475.1	475.1	475.1	475.1	475.1
17.5°	462.4	463.0	463.6	463.6	463.1	462.7	462.3	461.8
20°	453.7	454.3	454.9	455.0	454.5	454.1	453.7	453.2
22.5°	443.7	444.1	444.5	444.5	444.3	443.9	443.7	443.3
25°	427.7	427.9	428.1	428.0	427.7	427.5	427.2	427.0
27.5°	411.0	411.0	411.0	411.0	410.6	410.4	410.1	409.8
30°	398.7	398.6	398.4	398.2	398.0	397.7	397.4	397.1
32.5°	386.4	386.1	385.7	385.4	384.9	384.4	383.9	383.4
35°	367.2	366.8	366.3	365.8	365.1	364.3	363.6	362.9
37.5°	347.1	346.4	345.7	345.2	344.7	344.4	344.0	343.5
40°	333.0	332.3	331.5	331.0	330.7	330.4	330.1	329.8
42.5°	319.2	318.5	317.7	317.2	316.8	316.3	316.0	315.6
45°	298.7	297.6	296.6	295.9	295.7	295.4	295.2	294.9
47.5°	277.1	276.0	274.9	274.1	273.5	272.9	272.2	271.6
50°	262.3	261.1	260.0	259.2	258.5	257.9	257.3	256.7
52.5°	248.0	246.9	245.9	245.1	244.4	243.7	243.1	242.4
55°	225.6	224.8	224.0	223.3	222.7	222.1	221.4	220.8
57.5°	203.5	202.4	201.4	200.7	200.4	200.0	199.7	199.3
60°	188.5	187.5	186.7	185.9	185.3	184.7	184.1	183.5
62.5°	174.0	173.0	172.0	171.3	170.9	170.4	169.9	169.4
65°	151.2	150.4	149.6	149.0	148.7	148.4	148.0	147.7
67.5°	129.5	128.8	128.1	127.7	127.5	127.3	127.1	126.8
70°	115.1	114.6	114.1	113.7	113.3	113.0	112.5	112.2
72.5°	101.6	101.0	100.4	100.0	99.6	99.3	98.8	98.5
75°	80.7	80.4	80.1	79.8	79.5	79.1	78.8	78.4
77.5°	61.5	61.3	61.1	61.0	60.7	60.4	60.2	59.9
80°	49.2	49.1	49.0	48.8	48.6	48.5	48.3	48.1
82.5°	37.5	37.4	37.3	37.1	37.1	37.1	37.0	37.0
85°	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.1
87.5°	11.9	12.1	12.4	12.5	12.5	12.5	12.5	12.5
90°	18.3	19.4	20.5	21.4	22.0	22.6	23.3	24.0
92.5°	41.3	42.8	44.3	45.3	45.7	46.2	46.8	47.2
95°	80.2	81.7	83.3	84.3	84.7	85.2	85.6	86.0
97.5°	125.6	127.1	128.5	129.4	129.7	129.9	130.2	130.4
100°	157.0	159.1	161.1	162.3	162.7	163.2	163.7	164.1
102.5°	189.4	191.7	193.8	195.2	195.9	196.5	197.1	197.7
105°	241.8	243.1	244.4	245.5	246.2	246.8	247.5	248.1
107.5°	298.3	298.9	299.6	300.0	299.9	299.9	299.8	299.7
110°	337.5	338.2	338.8	339.1	338.8	338.6	338.4	338.2





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CATALOG NUMBER: S125DIP-S375D1205U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.9	377.1	377.5	377.4	377.0	376.6	376.2	375.8
115°	436.8	436.5	436.4	436.1	435.9	435.7	435.4	435.2
117.5°	496.8	497.0	497.1	496.8	495.9	495.1	494.1	493.3
120°	537.3	537.3	537.3	536.8	536.0	535.0	534.2	533.3
122.5°	577.0	576.8	576.6	576.2	575.4	574.7	574.0	573.3
125°	635.4	635.0	634.6	634.2	634.0	633.8	633.5	633.4
127.5°	693.5	693.3	693.1	692.8	692.3	691.8	691.4	691.0
130°	731.9	731.7	731.5	731.2	730.7	730.3	729.8	729.4
132.5°	768.8	768.5	768.3	767.9	767.2	766.6	766.0	765.4
135°	825.4	825.4	825.4	825.0	824.1	823.2	822.3	821.4
137.5°	880.6	880.9	881.1	880.7	879.6	878.5	877.4	876.2
140°	915.3	915.8	916.3	915.9	914.8	913.7	912.6	911.5
142.5°	949.4	949.7	949.9	949.5	948.4	947.4	946.2	945.1
145°	998.5	998.5	998.5	998.2	997.6	996.9	996.2	995.5
147.5°	1044.0	1044.6	1045.1	1044.6	1043.1	1041.6	1040.1	1038.5
150°	1072.5	1072.5	1072.5	1072.4	1071.9	1071.4	1071.0	1070.6
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.5	1097.8	1097.0
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)