

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: P332611-935

Luminaire Tested: **SA4XXDIP-C795D1035U935-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332611-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C795D1035U935-4F0-1E-UDD-D1  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

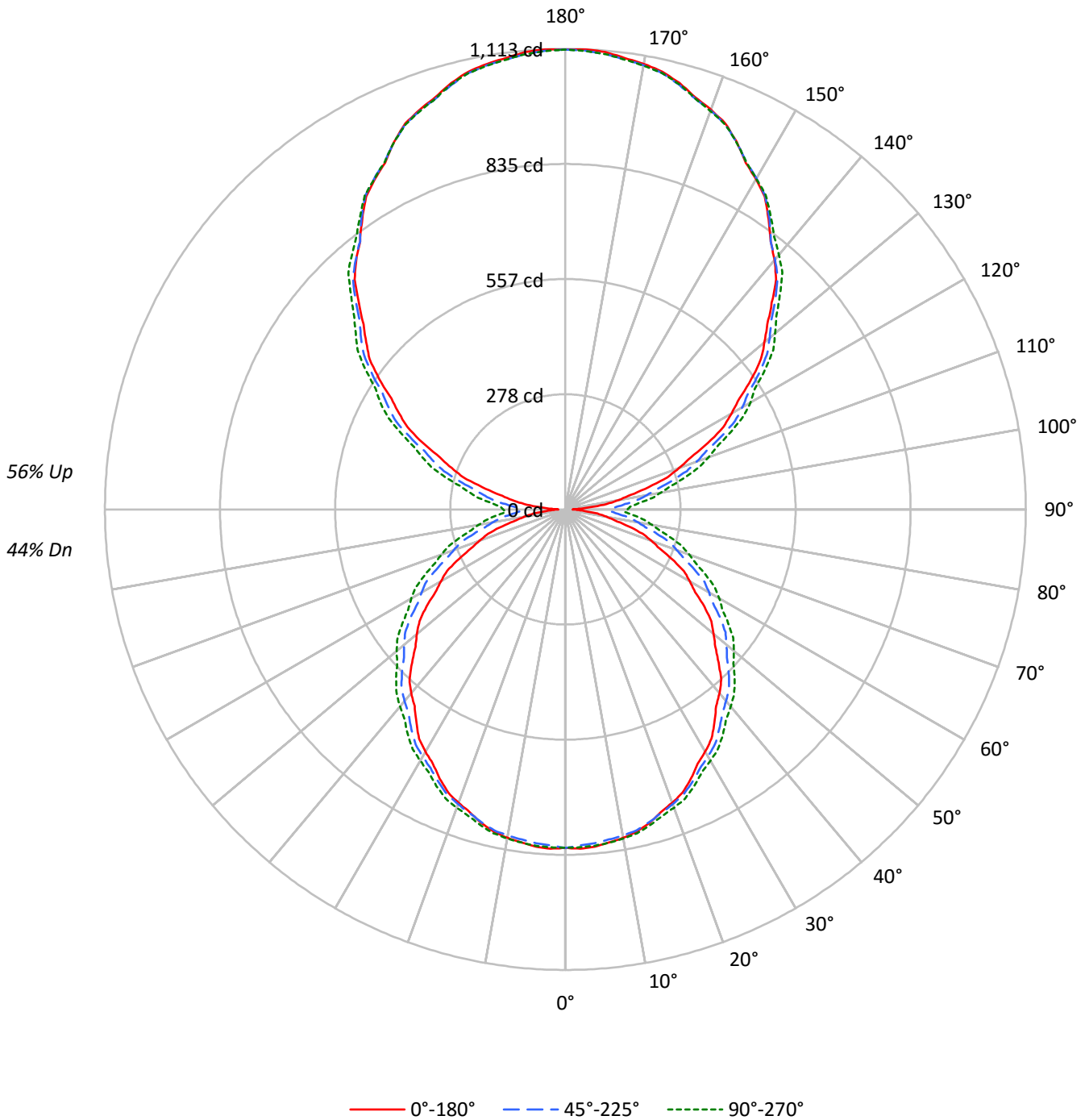
Lumens per Lamp: N/A  
Luminaire Lumens: 5874.1 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

Input Watts (W): 52  
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			
RC	80				70				50				30				10			
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	97	97	97	97	80	80	80	65	65	65	51	51	51	44		
1	96	91	87	83	87	83	80	76	69	66	64	55	54	52	43	42	41	35		
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	38	35	34	29		
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28	24		
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24	20		
5	66	54	46	39	60	50	42	37	41	36	31	33	29	26	26	23	21	17		
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18	15		
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16	13		
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14	12		
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13	11		
10	45	33	25	21	41	30	24	19	26	20	17	21	17	14	17	14	12	10		

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

	0°	45°	90°
0°	6603	6603	6603
5°	6622	6453	6471
10°	6582	6347	6342
15°	6524	6225	6190
20°	6435	6090	6044
25°	6334	5939	5882
30°	6226	5788	5714
35°	6103	5635	5569
40°	6004	5488	5417
45°	5858	5352	5286
50°	5735	5197	5149
55°	5608	5051	4987
60°	5409	4863	4840
65°	5191	4662	4657
70°	4927	4433	4447
75°	4561	4182	4255
80°	4149	3940	4067
85°	3636	3724	3960



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	1.3
10°-20°	221.9	3.8
20°-30°	335.5	5.7
30°-40°	405.9	6.9
40°-50°	429.2	7.3
50°-60°	403.9	6.9
60°-70°	335.1	5.7
70°-80°	235.4	4.0
80°-90°	136.4	2.3
90°-100°	152.3	2.6
100°-110°	275.6	4.7
110°-120°	407.8	6.9
120°-130°	508.0	8.6
130°-140°	555.3	9.5
140°-150°	538.2	9.2
150°-160°	451.0	7.7
160°-170°	300.1	5.1
170°-180°	105.1	1.8
0°-30°	634.9	10.8
0°-40°	1040.8	17.7
0°-60°	1873.9	31.9
0°-90°	2580.8	43.9
90°-120°	835.7	14.2
90°-150°	2437.2	41.5
90°-180°	3293.0	56.1
0°-180°	5874.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	819	816	810	816	816	78
15°	785	786	783	791	790	221
25°	718	723	726	736	737	331
35°	628	639	648	661	664	393
45°	524	541	559	574	579	405
55°	410	430	457	475	481	365
65°	284	313	344	366	374	281
75°	158	192	230	255	264	168
85°	49	87	128	155	165	52
90°	17	63	110	140	150	13
95°	64	102	145	171	181	67
105°	208	229	265	290	300	222
115°	380	390	416	435	441	375
125°	549	550	570	586	590	490
135°	706	711	717	730	733	546
145°	856	858	859	864	865	536
155°	980	980	979	982	979	451
165°	1066	1064	1062	1067	1064	301
175°	1110	1105	1104	1110	1104	105
180°	1111	1111	1111	1111	1111	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	820.8	820.3	819.8	819.3	818.8	817.9	816.6	815.3	814.0	812.7	813.8
5°	818.7	818.1	817.5	816.9	816.3	815.3	813.8	812.4	811.0	809.6	811.2
7.5°	811.8	811.4	811.1	810.7	810.3	809.5	808.4	807.2	806.0	804.9	806.7
10°	805.9	805.7	805.6	805.3	805.1	804.5	803.5	802.5	801.4	800.4	802.3
12.5°	797.9	797.8	797.8	797.7	797.7	797.4	796.7	795.9	795.2	794.5	796.3
15°	784.9	785.1	785.2	785.5	785.7	785.5	784.9	784.3	783.6	783.0	784.9
17.5°	767.1	767.7	768.3	769.0	769.6	769.7	769.6	769.6	769.4	769.3	771.2
20°	754.7	755.3	755.9	756.5	757.1	757.5	757.7	757.9	758.1	758.3	760.3
22.5°	740.7	741.5	742.3	743.0	743.8	744.4	744.8	745.1	745.5	745.9	747.9
25°	718.0	719.2	720.5	721.7	722.9	723.8	724.4	725.0	725.7	726.3	728.5
27.5°	692.8	694.5	696.3	698.1	699.9	701.3	702.2	703.1	704.0	705.0	707.1
30°	675.9	677.5	679.2	680.8	682.4	683.9	685.4	686.7	688.2	689.6	691.8
32.5°	657.5	659.5	661.5	663.4	665.4	667.1	668.7	670.3	671.9	673.5	676.1
35°	628.3	630.7	633.2	635.6	638.0	640.2	642.3	644.4	646.4	648.4	651.3
37.5°	598.7	601.6	604.4	607.2	610.0	612.7	615.2	617.7	620.3	622.8	625.7
40°	579.7	582.4	585.0	587.6	590.3	593.1	595.9	598.7	601.6	604.4	607.5
42.5°	557.8	560.7	563.7	566.6	569.6	572.7	576.1	579.5	582.8	586.1	589.5
45°	523.8	527.7	531.6	535.5	539.3	543.2	547.1	551.0	554.7	558.6	562.1
47.5°	491.5	495.4	499.4	503.4	507.4	511.6	516.1	520.6	525.0	529.5	533.1
50°	468.0	472.4	476.9	481.4	485.9	490.3	494.8	499.3	503.8	508.2	512.4
52.5°	444.5	449.0	453.5	458.0	462.4	467.3	472.3	477.5	482.7	487.8	491.8
55°	410.3	414.6	418.9	423.1	427.4	432.6	438.7	444.8	450.9	457.0	461.1
57.5°	372.0	377.3	382.6	387.9	393.1	398.8	404.9	411.0	417.1	423.1	427.9
60°	347.1	352.4	357.7	363.0	368.2	374.3	381.0	387.7	394.4	401.1	405.8
62.5°	322.9	328.7	334.5	340.3	346.0	352.3	359.0	365.8	372.5	379.2	383.8
65°	283.9	290.4	297.0	303.4	310.0	316.7	323.6	330.5	337.4	344.3	349.4
67.5°	246.3	253.3	260.2	267.1	274.1	281.2	288.6	296.0	303.4	310.8	316.0
70°	220.7	227.6	234.5	241.5	248.4	255.7	263.5	271.2	278.9	286.6	292.1
72.5°	195.8	202.9	210.0	217.1	224.1	231.8	240.0	248.2	256.5	264.7	270.0
75°	157.6	165.1	172.5	180.1	187.6	195.7	204.2	212.8	221.4	229.9	235.6
77.5°	121.8	129.8	137.8	145.8	153.7	162.2	171.2	180.1	189.1	198.0	203.8
80°	99.8	108.0	116.1	124.2	132.4	140.9	149.9	158.9	167.8	176.8	182.9
82.5°	77.8	86.3	94.8	103.2	111.7	120.5	129.4	138.4	147.3	156.3	162.5
85°	48.6	57.1	65.6	74.2	82.7	91.6	100.7	109.9	119.1	128.2	134.3
87.5°	27.6	36.3	45.0	53.8	62.5	71.5	80.7	89.9	99.2	108.4	114.5
90°	17.2	27.5	37.7	48.0	58.2	68.4	78.7	89.0	99.3	109.6	116.6
92.5°	32.3	42.0	51.7	61.5	71.2	81.0	90.8	100.7	110.5	120.3	126.7
95°	63.5	71.9	80.3	88.8	97.2	106.2	116.0	125.6	135.3	145.0	151.0
97.5°	100.9	108.1	115.2	122.3	129.5	138.0	147.8	157.6	167.5	177.3	183.3
100°	130.4	136.5	142.5	148.5	154.6	162.5	172.1	181.8	191.4	201.1	207.0
102.5°	162.0	166.9	171.9	176.8	181.8	188.9	198.3	207.6	217.0	226.3	232.2
105°	208.4	212.8	217.0	221.3	225.5	231.8	240.1	248.4	256.7	265.0	270.6
107.5°	259.0	262.6	266.1	269.7	273.3	278.7	285.9	293.2	300.4	307.6	313.1
110°	292.7	295.8	299.1	302.3	305.6	310.6	317.6	324.5	331.5	338.4	342.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	327.7	330.3	332.9	335.4	338.0	342.6	349.0	355.5	362.0	368.4	372.8
115°	380.2	382.0	383.8	385.7	387.5	391.5	397.6	403.7	409.9	416.0	420.3
117.5°	430.5	431.8	433.1	434.3	435.6	439.1	444.9	450.6	456.5	462.3	465.9
120°	463.5	464.9	466.2	467.6	469.0	472.3	477.7	483.0	488.4	493.7	496.8
122.5°	498.5	498.9	499.4	499.8	500.2	503.2	508.4	513.8	519.1	524.3	527.8
125°	549.4	549.1	549.0	548.8	548.5	551.0	555.8	560.7	565.6	570.5	573.9
127.5°	596.2	596.5	596.8	597.2	597.6	599.6	603.2	606.7	610.4	614.0	617.3
130°	628.4	628.8	629.1	629.5	629.9	631.7	634.9	638.2	641.4	644.7	648.0
132.5°	662.1	662.3	662.5	662.7	663.0	664.3	666.8	669.2	671.7	674.1	677.2
135°	705.7	706.8	708.0	709.1	710.2	711.5	713.0	714.4	715.8	717.2	720.1
137.5°	754.1	754.5	754.8	755.2	755.4	756.1	757.2	758.1	759.1	760.1	762.6
140°	786.4	786.6	786.8	787.0	787.2	787.4	787.6	787.7	788.0	788.2	790.7
142.5°	815.3	815.6	816.0	816.3	816.7	816.7	816.4	816.1	815.9	815.6	817.9
145°	856.0	856.6	857.1	857.7	858.2	858.6	858.8	859.0	859.2	859.4	860.4
147.5°	896.6	897.2	898.0	898.7	899.4	899.7	899.6	899.4	899.2	899.1	899.1
150°	921.4	921.9	922.5	923.0	923.6	923.9	923.9	923.9	923.9	923.9	923.9
152.5°	944.0	944.4	944.8	945.2	945.6	945.9	946.1	946.2	946.4	946.5	947.0
155°	979.7	979.7	979.7	979.7	979.7	979.6	979.4	979.2	979.0	978.9	979.6
157.5°	1010.0	1009.6	1009.3	1008.9	1008.6	1008.4	1008.3	1008.3	1008.3	1008.2	1008.8
160°	1027.9	1027.6	1027.4	1027.3	1027.1	1026.9	1026.7	1026.5	1026.3	1026.1	1026.7
162.5°	1044.3	1043.9	1043.4	1042.8	1042.3	1042.0	1041.8	1041.6	1041.5	1041.2	1042.2
165°	1066.5	1065.9	1065.4	1064.8	1064.2	1063.8	1063.3	1063.0	1062.6	1062.2	1063.3
167.5°	1083.6	1082.7	1081.9	1081.2	1080.3	1080.0	1080.0	1080.0	1080.0	1080.1	1081.2
170°	1093.1	1092.2	1091.2	1090.3	1089.3	1088.9	1089.2	1089.3	1089.5	1089.7	1090.9
172.5°	1100.0	1099.2	1098.5	1097.6	1096.8	1096.4	1096.5	1096.5	1096.6	1096.6	1097.9
175°	1109.5	1108.5	1107.6	1106.6	1105.7	1105.1	1104.9	1104.7	1104.5	1104.3	1105.7
177.5°	1112.6	1111.8	1111.0	1110.3	1109.5	1109.1	1109.1	1109.1	1109.1	1109.1	1110.2
180°	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	814.9	816.1	817.3	817.8	817.6	817.4	817.3	817.1
5°	812.9	814.5	816.1	816.8	816.6	816.4	816.2	816.0
7.5°	808.5	810.3	812.2	813.0	812.8	812.5	812.4	812.2
10°	804.1	805.9	807.8	808.6	808.4	808.1	808.0	807.8
12.5°	797.9	799.6	801.2	802.0	802.0	801.9	801.9	801.8
15°	786.7	788.5	790.3	791.2	791.0	790.7	790.6	790.3
17.5°	773.0	774.9	776.8	777.7	777.5	777.3	777.1	777.0
20°	762.3	764.4	766.5	767.5	767.5	767.5	767.5	767.5
22.5°	749.9	751.9	754.0	755.2	755.5	755.8	756.1	756.5
25°	730.7	733.0	735.2	736.4	736.6	736.8	737.0	737.3
27.5°	709.1	711.2	713.3	714.5	714.7	715.0	715.2	715.4
30°	694.1	696.3	698.5	699.9	700.3	700.7	701.1	701.5
32.5°	678.6	681.2	683.7	685.3	685.6	686.0	686.5	686.9
35°	654.1	656.9	659.8	661.5	662.1	662.7	663.4	664.0
37.5°	628.5	631.5	634.3	636.1	636.7	637.4	638.0	638.7
40°	610.5	613.6	616.6	618.5	619.4	620.2	621.0	621.8
42.5°	592.9	596.2	599.6	601.7	602.3	603.0	603.6	604.2
45°	565.6	569.0	572.5	574.7	575.8	576.8	577.8	578.8
47.5°	536.7	540.3	543.9	546.2	547.5	548.7	549.9	551.1
50°	516.4	520.5	524.5	527.2	528.4	529.7	530.9	532.1
52.5°	495.9	500.0	504.0	506.7	507.9	509.1	510.3	511.6
55°	465.1	469.2	473.3	476.0	477.2	478.4	479.6	480.8
57.5°	432.8	437.6	442.5	445.5	446.6	447.7	448.9	450.0
60°	410.5	415.2	419.8	423.0	424.6	426.3	427.9	429.6
62.5°	388.5	393.2	397.9	401.1	402.7	404.3	405.9	407.5
65°	354.6	359.6	364.7	368.1	369.7	371.3	372.9	374.5
67.5°	321.2	326.3	331.5	334.8	336.5	338.0	339.7	341.2
70°	297.6	303.2	308.7	312.1	313.5	315.0	316.3	317.8
72.5°	275.3	280.7	286.0	289.5	291.0	292.7	294.2	295.8
75°	241.3	246.9	252.7	256.4	258.3	260.1	261.9	263.7
77.5°	209.6	215.3	221.1	225.0	227.0	228.9	230.8	232.8
80°	189.0	195.1	201.2	205.0	206.6	208.3	209.9	211.5
82.5°	168.8	175.0	181.3	185.4	187.1	188.9	190.7	192.5
85°	140.4	146.5	152.7	156.7	158.8	160.7	162.8	164.9
87.5°	120.6	126.7	132.9	136.9	138.8	140.6	142.5	144.4
90°	123.6	130.7	137.8	142.3	144.3	146.3	148.4	150.3
92.5°	133.2	139.6	146.0	150.2	152.0	153.9	155.8	157.6
95°	157.1	163.2	169.3	173.2	175.0	176.8	178.7	180.6
97.5°	189.3	195.4	201.4	205.3	207.0	208.8	210.5	212.2
100°	212.8	218.7	224.6	228.3	229.7	231.1	232.6	233.9
102.5°	238.1	243.9	249.8	253.6	255.3	257.1	258.8	260.5
105°	276.3	282.0	287.7	291.5	293.8	295.9	298.2	300.3
107.5°	318.7	324.3	329.8	333.3	334.7	336.1	337.5	339.0
110°	347.0	351.3	355.6	358.9	361.0	363.3	365.4	367.6





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CATALOG NUMBER: SA4XXDIP-C795D1035U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	377.3	381.8	386.2	389.3	391.0	392.8	394.5	396.2
115°	424.6	428.9	433.2	435.9	437.1	438.4	439.6	440.8
117.5°	469.4	473.0	476.6	479.0	480.3	481.5	482.8	484.0
120°	499.9	503.0	506.1	508.7	510.7	512.7	514.7	516.7
122.5°	531.2	534.6	538.0	540.2	541.0	541.7	542.5	543.3
125°	577.5	580.9	584.4	586.6	587.5	588.3	589.1	590.0
127.5°	620.5	623.8	627.2	629.3	630.3	631.5	632.5	633.6
130°	651.3	654.5	657.8	659.7	660.1	660.6	661.1	661.5
132.5°	680.4	683.5	686.6	688.5	689.5	690.4	691.3	692.2
135°	723.0	725.9	728.8	730.5	731.2	731.8	732.5	733.1
137.5°	765.1	767.6	770.0	771.8	772.9	774.1	775.2	776.4
140°	793.1	795.6	798.0	799.6	800.5	801.3	802.1	803.0
142.5°	820.2	822.4	824.8	826.3	827.1	827.9	828.7	829.6
145°	861.4	862.5	863.5	864.2	864.4	864.6	864.9	865.1
147.5°	899.1	899.1	899.1	899.4	899.8	900.3	900.8	901.2
150°	923.9	923.9	923.9	923.8	923.6	923.3	923.2	923.0
152.5°	947.4	947.9	948.4	948.4	947.9	947.4	946.8	946.3
155°	980.4	981.1	981.9	981.9	981.1	980.4	979.6	978.9
157.5°	1009.4	1010.0	1010.6	1010.5	1009.9	1009.2	1008.6	1007.9
160°	1027.3	1027.9	1028.4	1028.2	1027.3	1026.3	1025.4	1024.4
162.5°	1043.3	1044.3	1045.3	1045.4	1044.5	1043.5	1042.6	1041.6
165°	1064.5	1065.7	1066.8	1067.0	1066.3	1065.5	1064.7	1063.9
167.5°	1082.4	1083.6	1084.7	1084.7	1083.5	1082.3	1081.1	1080.0
170°	1092.0	1093.1	1094.3	1094.2	1092.9	1091.5	1090.2	1088.8
172.5°	1099.2	1100.4	1101.8	1101.7	1100.4	1099.1	1097.8	1096.4
175°	1107.0	1108.4	1109.7	1109.7	1108.4	1107.0	1105.7	1104.3
177.5°	1111.3	1112.3	1113.4	1113.4	1112.2	1110.9	1109.7	1108.5
180°	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2

(END OF REPORT)