

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: P332556-927

Luminaire Tested: **SA4XXDIP-C575D810U927-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332556-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C575D810U927-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

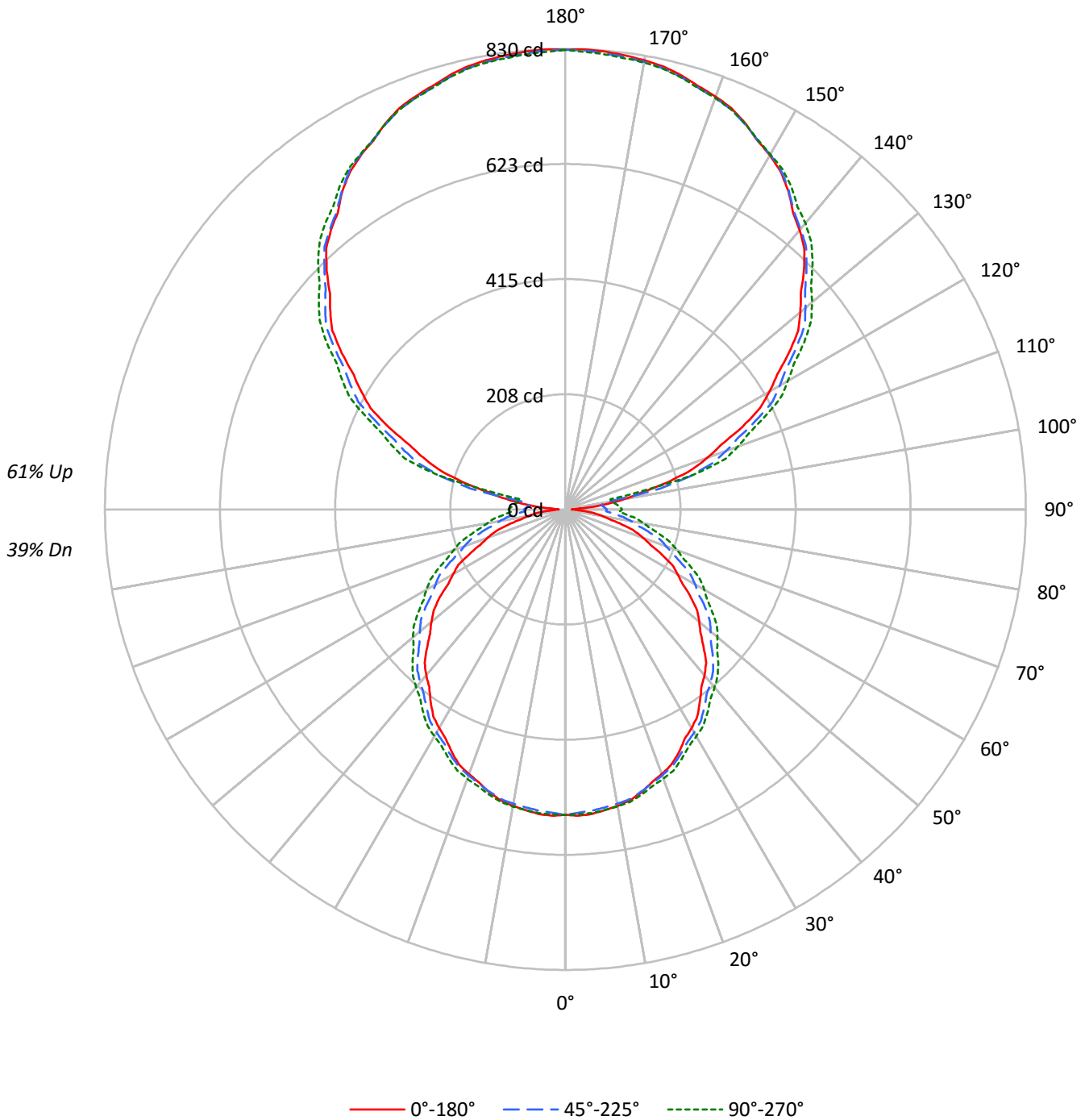
Lumens per Lamp: N/A
Luminaire Lumens: 4440.6 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

Input Watts (W): 38.4
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





TEST NUMBER: P332556-927

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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	77	77	77	61	61	61	46	46	46	39
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	66	78	71	66	61	58	54	50	46	43	40	34	32	31	26
3	78	68	61	55	70	62	56	50	51	46	42	40	37	34	30	28	26	21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18
5	65	53	45	39	59	49	42	36	40	34	30	32	28	25	24	21	19	15
6	60	48	40	34	54	44	36	31	36	30	26	28	24	21	22	19	17	13
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	29	24	20	24	20	17	18	15	13	11
9	48	35	28	23	43	32	26	21	27	22	18	22	18	15	17	14	12	9
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4444	4444	4444
5°	4458	4343	4355
10°	4431	4273	4269
15°	4391	4190	4167
20°	4331	4099	4068
25°	4264	3998	3958
30°	4191	3896	3847
35°	4108	3792	3748
40°	4041	3694	3646
45°	3943	3603	3558
50°	3860	3498	3465
55°	3775	3400	3356
60°	3640	3274	3257
65°	3494	3139	3136
70°	3315	2985	2993
75°	3068	2814	2864
80°	2794	2652	2738
85°	2439	2507	2665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.2
10°-20°	149.4	3.4
20°-30°	225.8	5.1
30°-40°	273.2	6.2
40°-50°	288.9	6.5
50°-60°	271.9	6.1
60°-70°	225.6	5.1
70°-80°	158.4	3.6
80°-90°	92.0	2.1
90°-100°	81.5	1.8
100°-110°	220.0	5.0
110°-120°	371.9	8.4
120°-130°	453.5	10.2
130°-140°	475.7	10.7
140°-150°	440.1	9.9
150°-160°	353.9	8.0
160°-170°	228.2	5.1
170°-180°	78.7	1.8
0°-30°	427.3	9.6
0°-40°	700.6	15.8
0°-60°	1261.3	28.4
0°-90°	1737.3	39.1
90°-120°	673.4	15.2
90°-150°	2042.6	46.0
90°-180°	2703.0	60.9
0°-180°	4440.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	551	549	545	550	549	52
15°	528	529	527	532	532	149
25°	483	487	489	495	496	223
35°	423	430	436	445	447	265
45°	353	364	376	386	390	272
55°	276	289	308	319	324	246
65°	191	211	232	247	252	189
75°	106	129	155	171	178	113
85°	33	59	86	104	111	35
90°	12	43	75	95	102	8
95°	42	43	67	87	94	50
105°	192	209	234	253	238	201
115°	352	360	378	393	397	346
125°	492	494	508	521	526	439
135°	608	608	614	625	630	469
145°	700	702	702	706	710	438
155°	768	768	766	768	767	354
165°	810	807	806	811	806	229
175°	828	825	825	830	823	79
180°	828	828	828	828	828	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	552.5	552.2	551.8	551.4	551.1	550.6	549.7	548.8	547.9	547.0	547.8
5°	551.1	550.7	550.2	549.9	549.5	548.7	547.8	546.8	545.9	544.9	546.1
7.5°	546.4	546.1	545.9	545.7	545.4	544.9	544.2	543.4	542.5	541.7	543.0
10°	542.5	542.3	542.2	542.1	541.9	541.5	540.8	540.1	539.5	538.8	540.0
12.5°	537.0	537.0	537.0	536.9	536.9	536.7	536.2	535.8	535.3	534.8	535.9
15°	528.3	528.5	528.5	528.7	528.9	528.7	528.3	527.9	527.4	527.0	528.3
17.5°	516.3	516.7	517.1	517.5	518.0	518.2	518.1	518.0	517.9	517.8	519.0
20°	507.9	508.3	508.7	509.2	509.6	509.8	510.0	510.2	510.2	510.4	511.7
22.5°	498.6	499.1	499.6	500.1	500.7	501.1	501.3	501.5	501.8	502.0	503.4
25°	483.3	484.1	485.0	485.8	486.6	487.2	487.6	488.0	488.5	488.9	490.4
27.5°	466.3	467.5	468.7	469.9	471.1	472.0	472.6	473.2	473.9	474.5	475.9
30°	455.0	456.1	457.1	458.2	459.3	460.3	461.3	462.2	463.2	464.2	465.7
32.5°	442.6	443.9	445.2	446.6	447.9	449.1	450.1	451.2	452.3	453.4	455.0
35°	422.9	424.5	426.2	427.8	429.4	430.9	432.3	433.7	435.1	436.4	438.4
37.5°	403.1	404.9	406.8	408.7	410.6	412.4	414.1	415.8	417.5	419.1	421.1
40°	390.2	392.0	393.8	395.5	397.4	399.2	401.1	403.0	405.0	406.9	408.9
42.5°	375.4	377.4	379.4	381.4	383.4	385.6	387.8	390.0	392.3	394.5	396.8
45°	352.6	355.2	357.8	360.4	363.0	365.6	368.2	370.8	373.4	376.0	378.3
47.5°	330.8	333.4	336.1	338.8	341.5	344.4	347.4	350.4	353.4	356.4	358.9
50°	315.0	318.0	321.0	324.1	327.1	330.1	333.1	336.1	339.1	342.1	344.8
52.5°	299.2	302.2	305.2	308.2	311.2	314.5	318.0	321.4	324.9	328.3	331.1
55°	276.2	279.0	281.9	284.8	287.6	291.1	295.2	299.4	303.5	307.6	310.4
57.5°	250.4	254.0	257.5	261.1	264.7	268.5	272.5	276.6	280.7	284.8	288.0
60°	233.6	237.2	240.7	244.3	247.9	251.9	256.4	260.9	265.5	270.0	273.1
62.5°	217.4	221.3	225.1	229.0	232.9	237.1	241.6	246.1	250.7	255.2	258.3
65°	191.1	195.5	199.9	204.2	208.7	213.2	217.8	222.4	227.1	231.8	235.2
67.5°	165.8	170.5	175.2	179.8	184.4	189.3	194.2	199.2	204.2	209.2	212.7
70°	148.5	153.2	157.9	162.6	167.2	172.1	177.3	182.5	187.7	193.0	196.6
72.5°	131.8	136.6	141.3	146.1	150.8	156.0	161.5	167.1	172.6	178.2	181.7
75°	106.0	111.1	116.1	121.2	126.3	131.7	137.4	143.2	149.0	154.7	158.6
77.5°	82.0	87.4	92.8	98.1	103.5	109.2	115.2	121.2	127.2	133.2	137.1
80°	67.2	72.6	78.2	83.7	89.1	94.8	100.9	106.9	113.0	119.0	123.1
82.5°	52.4	58.1	63.8	69.5	75.2	81.0	87.1	93.1	99.1	105.2	109.4
85°	32.6	38.4	44.2	49.9	55.7	61.6	67.8	74.0	80.2	86.3	90.4
87.5°	18.6	24.5	30.4	36.3	42.2	48.2	54.4	60.7	66.9	73.1	77.2
90°	11.7	18.7	25.7	32.7	39.7	46.7	53.7	60.7	67.7	74.6	79.5
92.5°	17.2	22.2	27.2	32.2	37.2	43.3	50.2	57.2	64.2	71.2	75.9
95°	42.1	41.9	41.7	41.6	41.4	44.2	50.0	55.8	61.5	67.3	71.8
97.5°	79.6	86.4	93.2	100.1	106.9	105.4	95.5	85.8	76.0	66.1	69.9
100°	108.4	114.4	120.4	126.5	132.5	128.7	115.0	101.4	87.8	74.1	75.5
102.5°	141.1	146.0	150.9	155.9	160.8	164.7	167.5	170.2	172.9	175.7	154.1
105°	192.0	195.6	199.2	202.7	206.3	210.9	216.7	222.4	228.1	233.9	238.6
107.5°	240.3	243.0	245.7	248.3	251.0	255.2	260.9	266.6	272.4	278.1	282.0
110°	272.5	274.8	277.2	279.5	281.9	285.8	291.4	297.1	302.7	308.3	311.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	303.7	306.2	308.6	311.1	313.5	317.2	322.2	327.1	332.1	337.1	340.0
115°	351.8	353.5	355.1	356.7	358.4	361.3	365.6	369.8	374.1	378.3	381.6
117.5°	395.7	397.0	398.2	399.5	400.8	403.6	408.1	412.4	416.8	421.2	424.0
120°	424.9	425.9	426.8	427.8	428.7	431.1	435.0	438.8	442.7	446.5	449.5
122.5°	452.7	453.0	453.4	453.8	454.3	456.5	460.4	464.4	468.3	472.2	475.2
125°	491.8	492.2	492.7	493.1	493.5	495.2	498.4	501.5	504.7	507.8	510.9
127.5°	529.3	529.3	529.3	529.3	529.3	531.0	534.2	537.5	540.7	544.0	546.4
130°	553.1	553.1	553.1	553.1	553.1	554.4	557.1	559.6	562.2	564.8	567.4
132.5°	575.4	575.5	575.6	575.8	575.8	577.0	579.3	581.6	583.9	586.1	588.7
135°	608.2	608.1	608.0	607.8	607.7	608.4	609.9	611.4	612.9	614.4	616.9
137.5°	637.9	637.8	637.7	637.6	637.5	638.0	639.1	640.2	641.3	642.3	644.6
140°	657.2	657.4	657.4	657.6	657.7	658.0	658.4	658.9	659.3	659.7	661.9
142.5°	674.0	674.5	674.9	675.4	675.9	676.2	676.3	676.4	676.4	676.5	678.3
145°	700.5	700.8	701.1	701.4	701.6	701.8	701.8	701.8	701.8	701.8	702.7
147.5°	721.8	722.4	723.0	723.7	724.3	724.5	724.4	724.2	724.1	724.0	724.2
150°	737.0	737.5	737.9	738.3	738.7	738.9	738.7	738.6	738.5	738.3	738.3
152.5°	749.5	749.9	750.3	750.8	751.1	751.2	751.0	750.8	750.4	750.2	750.4
155°	767.5	767.5	767.7	767.9	768.0	767.9	767.5	767.0	766.6	766.2	766.8
157.5°	782.7	782.6	782.5	782.4	782.4	782.0	781.6	781.2	780.7	780.2	780.9
160°	791.6	791.2	790.8	790.4	790.0	789.6	789.6	789.4	789.3	789.1	790.0
162.5°	799.5	799.0	798.4	798.0	797.4	797.1	796.9	796.9	796.7	796.5	797.4
165°	809.5	808.9	808.2	807.5	806.8	806.4	806.4	806.4	806.4	806.4	807.6
167.5°	817.5	816.7	816.0	815.3	814.6	814.2	814.1	814.0	814.0	813.9	815.1
170°	822.0	821.1	820.3	819.4	818.6	818.3	818.4	818.6	818.7	818.9	819.9
172.5°	824.9	824.1	823.2	822.4	821.7	821.3	821.4	821.6	821.7	821.8	822.9
175°	828.1	827.3	826.5	825.7	824.8	824.5	824.7	824.7	824.9	825.1	826.2
177.5°	829.7	828.9	828.1	827.3	826.6	826.2	826.5	826.7	827.0	827.1	828.0
180°	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.5	550.5	550.5	550.5	550.5	550.5	550.5	550.5
2.5°	548.6	549.3	550.1	550.4	550.3	550.2	550.1	550.0
5°	547.2	548.2	549.3	549.8	549.7	549.5	549.4	549.2
7.5°	544.2	545.4	546.7	547.2	547.1	546.9	546.8	546.7
10°	541.2	542.5	543.7	544.2	544.2	544.0	543.8	543.7
12.5°	537.1	538.2	539.3	539.9	539.9	539.8	539.8	539.8
15°	529.5	530.8	532.0	532.5	532.4	532.3	532.1	532.0
17.5°	520.3	521.6	522.8	523.4	523.3	523.2	523.1	523.0
20°	513.2	514.5	515.9	516.6	516.6	516.6	516.6	516.6
22.5°	504.8	506.1	507.5	508.3	508.5	508.7	509.0	509.2
25°	491.9	493.4	494.9	495.7	495.8	496.0	496.1	496.2
27.5°	477.4	478.7	480.1	480.9	481.1	481.3	481.4	481.6
30°	467.2	468.7	470.2	471.1	471.3	471.7	471.9	472.2
32.5°	456.8	458.5	460.3	461.2	461.5	461.8	462.1	462.3
35°	440.3	442.2	444.1	445.3	445.7	446.1	446.5	446.9
37.5°	423.1	425.0	427.0	428.2	428.6	429.0	429.4	429.9
40°	411.0	413.0	415.1	416.4	416.9	417.5	418.0	418.6
42.5°	399.1	401.3	403.6	405.0	405.4	405.8	406.3	406.7
45°	380.7	383.0	385.3	386.8	387.5	388.2	388.9	389.6
47.5°	361.2	363.7	366.1	367.7	368.5	369.3	370.2	371.0
50°	347.6	350.4	353.1	354.9	355.7	356.5	357.4	358.1
52.5°	333.8	336.5	339.3	341.0	341.9	342.7	343.5	344.4
55°	313.1	315.8	318.5	320.4	321.2	322.0	322.8	323.6
57.5°	291.3	294.6	297.9	299.8	300.6	301.3	302.1	302.9
60°	276.3	279.5	282.6	284.7	285.8	286.9	288.0	289.1
62.5°	261.5	264.7	267.8	269.9	271.0	272.1	273.2	274.3
65°	238.6	242.1	245.5	247.7	248.8	249.9	251.0	252.2
67.5°	216.2	219.7	223.2	225.4	226.5	227.5	228.6	229.7
70°	200.3	204.1	207.7	210.1	211.0	212.0	212.9	213.9
72.5°	185.3	188.9	192.5	194.8	195.9	196.9	198.0	199.1
75°	162.4	166.2	170.1	172.6	173.8	175.1	176.3	177.5
77.5°	141.1	145.0	148.9	151.5	152.7	154.1	155.3	156.7
80°	127.2	131.3	135.4	138.0	139.1	140.2	141.3	142.4
82.5°	113.6	117.8	122.1	124.8	126.0	127.1	128.3	129.6
85°	94.5	98.6	102.7	105.5	106.9	108.2	109.6	111.0
87.5°	81.4	85.6	89.7	92.4	93.6	94.9	96.2	97.4
90°	84.3	89.0	93.9	97.0	98.3	99.7	101.1	102.4
92.5°	80.6	85.2	90.0	92.8	94.0	95.1	96.3	97.5
95°	76.3	80.8	85.3	88.3	89.7	91.0	92.4	93.8
97.5°	73.5	77.2	80.9	83.3	84.7	86.0	87.3	88.6
100°	76.8	78.2	79.5	80.8	81.8	82.9	84.1	85.2
102.5°	132.4	110.7	89.0	78.8	79.9	81.0	82.1	83.2
105°	243.3	248.0	252.6	253.0	249.1	245.3	241.4	237.6
107.5°	286.0	290.0	294.0	296.7	298.2	299.7	301.3	302.8
110°	315.1	318.5	322.0	324.5	326.0	327.5	329.0	330.5



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CATALOG NUMBER: SA4XXDIP-C575D810U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	343.0	346.0	349.0	351.3	352.9	354.5	356.2	357.7
115°	384.9	388.2	391.5	393.6	394.6	395.5	396.5	397.4
117.5°	426.7	429.6	432.4	434.3	435.3	436.3	437.4	438.5
120°	452.5	455.5	458.5	460.5	461.3	462.1	463.0	463.7
122.5°	478.1	480.9	483.9	485.7	486.4	487.1	487.8	488.5
125°	513.9	516.9	519.9	521.9	522.8	523.8	524.7	525.7
127.5°	548.7	551.2	553.6	555.2	556.0	556.8	557.6	558.4
130°	570.1	572.7	575.3	576.9	577.8	578.6	579.4	580.3
132.5°	591.1	593.7	596.1	597.7	598.4	599.1	599.8	600.6
135°	619.3	621.8	624.3	626.1	627.2	628.3	629.4	630.4
137.5°	646.9	649.2	651.5	653.0	653.6	654.2	654.7	655.4
140°	664.0	666.2	668.4	669.9	670.7	671.6	672.4	673.2
142.5°	680.2	682.1	684.0	685.2	685.8	686.4	687.0	687.6
145°	703.7	704.6	705.6	706.5	707.3	708.1	709.0	709.8
147.5°	724.4	724.6	724.8	725.2	725.8	726.4	727.0	727.5
150°	738.3	738.3	738.3	738.4	738.6	738.6	738.8	738.9
152.5°	750.7	750.9	751.1	751.1	751.1	751.0	750.9	750.8
155°	767.3	767.9	768.4	768.5	768.0	767.6	767.2	766.8
157.5°	781.6	782.4	783.1	783.1	782.4	781.6	780.9	780.2
160°	790.8	791.6	792.4	792.4	791.6	790.8	790.0	789.1
162.5°	798.2	799.0	799.9	799.8	798.8	797.9	797.0	796.1
165°	808.7	809.8	810.9	810.8	809.5	808.3	807.1	805.8
167.5°	816.3	817.5	818.7	818.6	817.3	815.9	814.5	813.2
170°	821.0	822.1	823.2	823.1	821.7	820.4	819.0	817.6
172.5°	824.0	825.1	826.2	826.0	824.6	823.1	821.6	820.1
175°	827.5	828.8	830.0	829.8	828.1	826.5	824.8	823.2
177.5°	828.9	829.8	830.7	830.4	829.1	827.8	826.5	825.1
180°	828.1	828.1	828.1	828.1	828.1	828.1	828.1	828.1

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