

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: P333217-930

Luminaire Tested: **S125DIP-S850D590U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333217-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D590U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4603.3 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

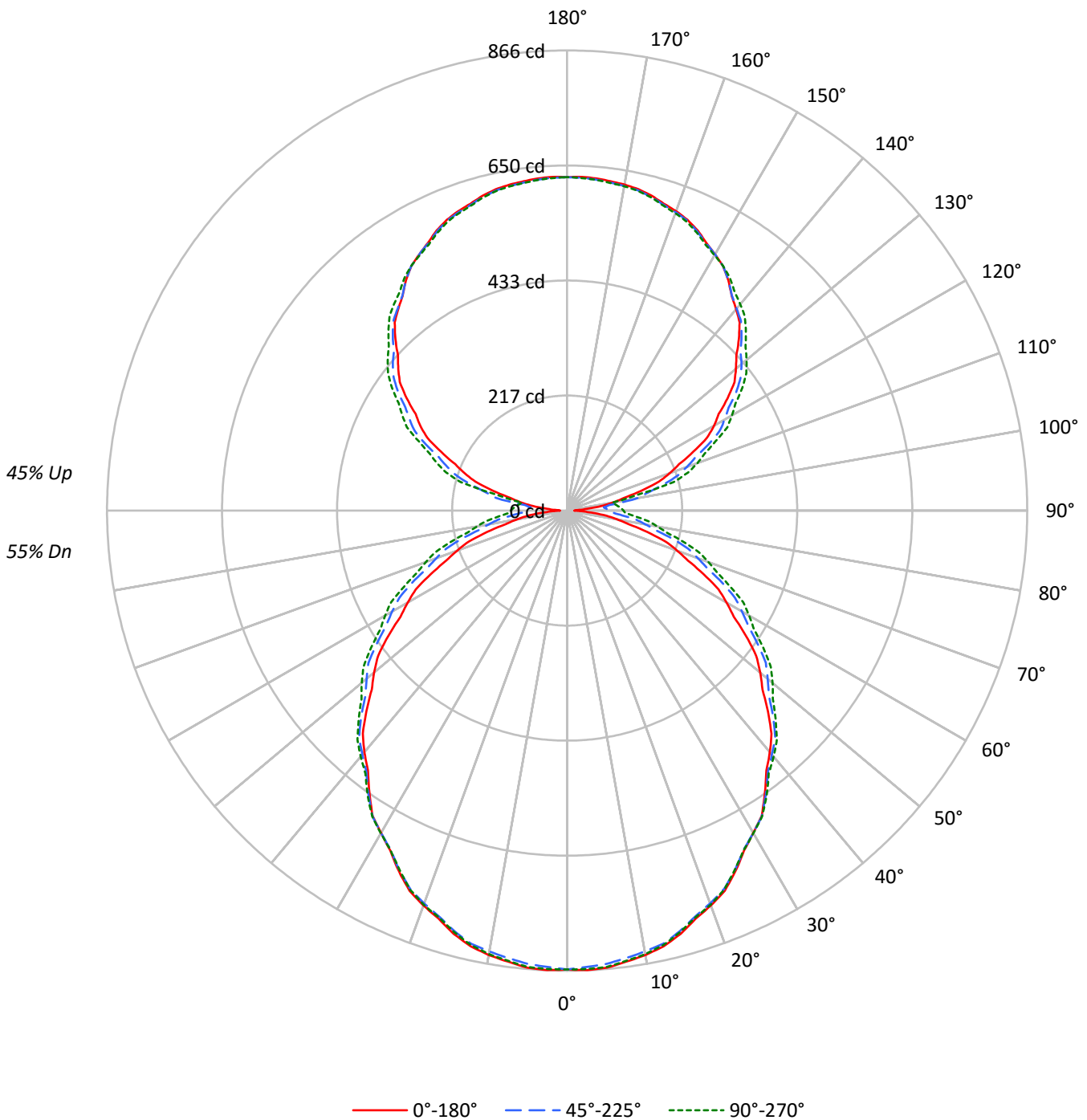
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333217-930

CATALOG NUMBER: S125DIP-S850D590U930-4F0-1E-UDD-D

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	93	89	85	91	87	83	80	74	71	69	63	61	59	52	51	49	44
2	89	81	74	69	82	75	70	65	64	60	56	55	51	48	45	43	41	36
3	81	71	63	57	75	66	59	54	57	51	47	48	44	41	40	37	34	31
4	74	63	54	48	68	58	51	45	50	44	40	43	38	35	36	32	30	26
5	68	56	47	41	63	52	44	39	45	39	34	38	34	30	32	28	26	22
6	62	50	42	36	58	47	39	34	40	34	30	34	30	26	29	25	22	20
7	58	45	37	31	53	42	35	29	37	31	26	31	27	23	26	23	20	17
8	54	41	33	27	50	38	31	26	33	27	23	29	24	20	24	21	18	15
9	50	37	30	24	46	35	28	23	31	25	21	26	22	18	22	19	16	14
10	47	34	27	22	43	32	25	21	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.8
10°-20°	231.8	5.0
20°-30°	344.8	7.5
30°-40°	408.4	8.9
40°-50°	422.2	9.2
50°-60°	389.0	8.4
60°-70°	314.4	6.8
70°-80°	210.6	4.6
80°-90°	110.5	2.4
90°-100°	84.1	1.8
100°-110°	185.7	4.0
110°-120°	285.2	6.2
120°-130°	344.3	7.5
130°-140°	359.4	7.8
140°-150°	331.8	7.2
150°-160°	267.2	5.8
160°-170°	172.8	3.8
170°-180°	59.6	1.3
0°-30°	658.3	14.3
0°-40°	1066.7	23.2
0°-60°	1877.9	40.8
0°-90°	2513.4	54.6
90°-120°	555.0	12.1
90°-150°	1590.4	34.5
90°-180°	2090.0	45.4
0°-180°	4603.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	45	77	98	106	10
95°	38	58	69	89	96	42
105°	144	160	185	202	208	153
115°	262	271	293	305	308	260
125°	368	372	388	399	402	329
135°	457	459	464	474	476	352
145°	529	529	529	533	534	330
155°	582	579	580	581	577	268
165°	614	611	611	614	610	173
175°	628	625	625	628	625	60
180°	628	628	628	628	628	



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CATALOG NUMBER: S125DIP-S850D590U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.5	32.7	38.9	45.1	51.3	57.6	64.2	70.7	77.2	83.8	88.2
90°	14.0	20.9	27.7	34.6	41.4	48.4	55.5	62.6	69.8	76.9	81.7
92.5°	19.3	24.4	29.4	34.3	39.3	45.4	52.6	59.8	66.9	74.2	78.8
95°	37.5	42.1	46.7	51.3	55.8	59.4	61.9	64.3	66.8	69.2	73.9
97.5°	65.3	70.3	75.3	80.2	85.2	86.9	85.3	83.6	82.1	80.5	81.5
100°	87.0	91.2	95.6	99.8	104.0	109.4	115.9	122.3	128.7	135.1	123.7
102.5°	109.0	113.1	117.1	121.2	125.2	130.3	136.4	142.5	148.6	154.7	155.6
105°	144.4	147.8	151.2	154.7	158.1	162.6	168.3	173.9	179.5	185.2	189.0
107.5°	181.2	183.7	186.2	188.8	191.4	195.4	201.1	206.7	212.3	217.9	221.7
110°	205.0	207.2	209.5	211.8	214.0	217.9	223.4	228.9	234.3	239.8	243.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	228.1	230.2	232.2	234.2	236.3	239.9	245.2	250.5	255.7	260.9	264.0
115°	261.9	263.7	265.5	267.3	269.2	272.6	277.6	282.6	287.6	292.6	295.5
117.5°	296.9	297.7	298.5	299.4	300.2	303.1	308.2	313.2	318.2	323.2	325.9
120°	319.1	319.6	320.1	320.5	321.0	323.5	328.2	332.8	337.5	342.1	345.1
122.5°	338.2	338.8	339.5	340.1	340.8	343.3	347.6	352.0	356.3	360.6	363.5
125°	368.5	369.1	369.6	370.1	370.7	372.8	376.6	380.3	384.1	387.9	390.4
127.5°	396.8	397.1	397.5	397.8	398.1	399.8	402.8	405.9	408.9	411.9	414.4
130°	414.7	415.0	415.3	415.6	416.0	417.5	420.3	423.0	425.7	428.4	430.8
132.5°	431.9	432.4	433.0	433.6	434.1	435.3	437.1	438.9	440.7	442.5	445.1
135°	457.1	457.5	458.0	458.4	458.9	459.6	460.7	461.8	462.9	464.0	466.3
137.5°	480.3	480.6	481.0	481.4	481.8	482.2	482.7	483.1	483.6	484.0	486.3
140°	494.9	495.0	495.3	495.5	495.7	495.8	495.9	496.0	496.1	496.2	498.5
142.5°	508.6	508.6	508.6	508.5	508.5	508.6	508.7	509.0	509.2	509.3	511.1
145°	528.8	528.8	528.8	528.9	528.9	528.9	528.9	528.9	528.9	528.9	529.9
147.5°	545.6	545.6	545.5	545.5	545.4	545.5	545.6	545.8	545.8	546.0	546.4
150°	556.8	556.6	556.4	556.2	556.0	556.0	556.2	556.4	556.6	556.8	557.0
152.5°	567.6	567.1	566.7	566.2	565.7	565.7	565.8	566.1	566.2	566.5	566.7
155°	581.5	580.8	580.2	579.6	578.9	578.8	578.9	579.2	579.4	579.6	579.9
157.5°	592.2	591.7	591.4	591.0	590.7	590.5	590.5	590.5	590.5	590.6	590.9
160°	599.6	599.0	598.3	597.7	597.1	596.9	597.0	597.0	597.1	597.3	597.7
162.5°	605.5	605.0	604.3	603.6	603.1	602.8	602.9	603.0	603.1	603.2	603.8
165°	613.5	612.9	612.3	611.7	611.1	610.8	610.9	611.0	611.1	611.2	611.8
167.5°	619.5	618.9	618.2	617.6	616.9	616.7	616.8	616.9	616.9	617.1	617.8
170°	622.9	622.2	621.4	620.7	620.0	619.6	619.7	619.9	620.0	620.0	620.9
172.5°	625.1	624.4	623.6	622.9	622.2	621.9	622.1	622.3	622.5	622.6	623.4
175°	627.5	626.9	626.2	625.7	625.0	624.8	624.8	625.0	625.1	625.2	626.0
177.5°	628.6	628.1	627.6	627.1	626.6	626.4	626.5	626.6	626.6	626.7	627.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	92.6	97.1	101.5	104.4	105.8	107.2	108.6	109.9
90°	86.6	91.4	96.3	99.5	101.1	102.7	104.4	106.0
92.5°	83.6	88.2	92.9	96.0	97.5	99.0	100.4	101.8
95°	78.6	83.2	87.9	90.9	92.2	93.5	94.8	96.1
97.5°	82.5	83.6	84.6	85.8	87.1	88.3	89.6	90.9
100°	112.3	100.8	89.4	84.0	84.7	85.4	86.1	86.8
102.5°	156.5	157.4	158.3	155.8	149.9	144.0	138.1	132.2
105°	192.7	196.5	200.2	202.8	203.9	205.1	206.4	207.6
107.5°	225.4	229.2	232.9	235.2	236.1	236.9	237.8	238.6
110°	246.4	249.6	252.9	255.2	256.7	258.0	259.5	260.9



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CATALOG NUMBER: S125DIP-S850D590U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	267.0	270.0	273.0	275.2	276.3	277.5	278.7	279.8
115°	298.6	301.5	304.5	306.2	306.7	307.2	307.8	308.3
117.5°	328.6	331.2	333.9	335.7	336.7	337.7	338.8	339.7
120°	348.1	351.1	354.1	355.9	356.4	357.1	357.7	358.3
122.5°	366.3	369.1	371.9	373.7	374.1	374.7	375.2	375.8
125°	393.1	395.7	398.3	399.9	400.5	401.1	401.8	402.4
127.5°	417.0	419.6	422.2	423.5	423.9	424.2	424.5	424.9
130°	433.1	435.5	437.7	439.1	439.5	440.0	440.4	440.8
132.5°	447.7	450.2	452.8	454.2	454.5	454.8	455.0	455.3
135°	468.5	470.8	473.0	474.3	474.6	474.9	475.2	475.6
137.5°	488.6	490.8	493.1	494.3	494.6	494.8	495.0	495.2
140°	500.7	503.0	505.2	506.5	506.6	506.7	506.9	507.0
142.5°	512.9	514.8	516.6	517.6	517.6	517.8	518.0	518.0
145°	531.0	532.0	533.0	533.6	533.8	533.9	534.0	534.2
147.5°	546.8	547.3	547.7	547.7	547.3	546.9	546.5	546.1
150°	557.2	557.4	557.6	557.4	556.8	556.1	555.5	554.8
152.5°	566.9	567.1	567.3	567.0	566.3	565.7	564.9	564.2
155°	580.2	580.5	580.8	580.6	579.8	578.9	578.1	577.2
157.5°	591.3	591.6	591.9	591.7	590.8	590.0	589.1	588.3
160°	598.1	598.5	598.9	598.7	597.9	597.0	596.2	595.4
162.5°	604.4	605.0	605.5	605.4	604.5	603.6	602.7	601.7
165°	612.5	613.1	613.7	613.6	612.8	612.0	611.1	610.3
167.5°	618.6	619.3	620.0	620.0	619.1	618.1	617.2	616.2
170°	621.7	622.6	623.4	623.3	622.4	621.4	620.5	619.6
172.5°	624.1	624.9	625.7	625.6	624.6	623.7	622.7	621.8
175°	626.8	627.6	628.5	628.4	627.5	626.6	625.7	624.7
177.5°	627.9	628.5	629.1	629.0	628.4	627.7	627.0	626.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5

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