

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: P333182-930

Luminaire Tested: **S125DIP-S610D810U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333182-930  
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-S610D810U930-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4244.8 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

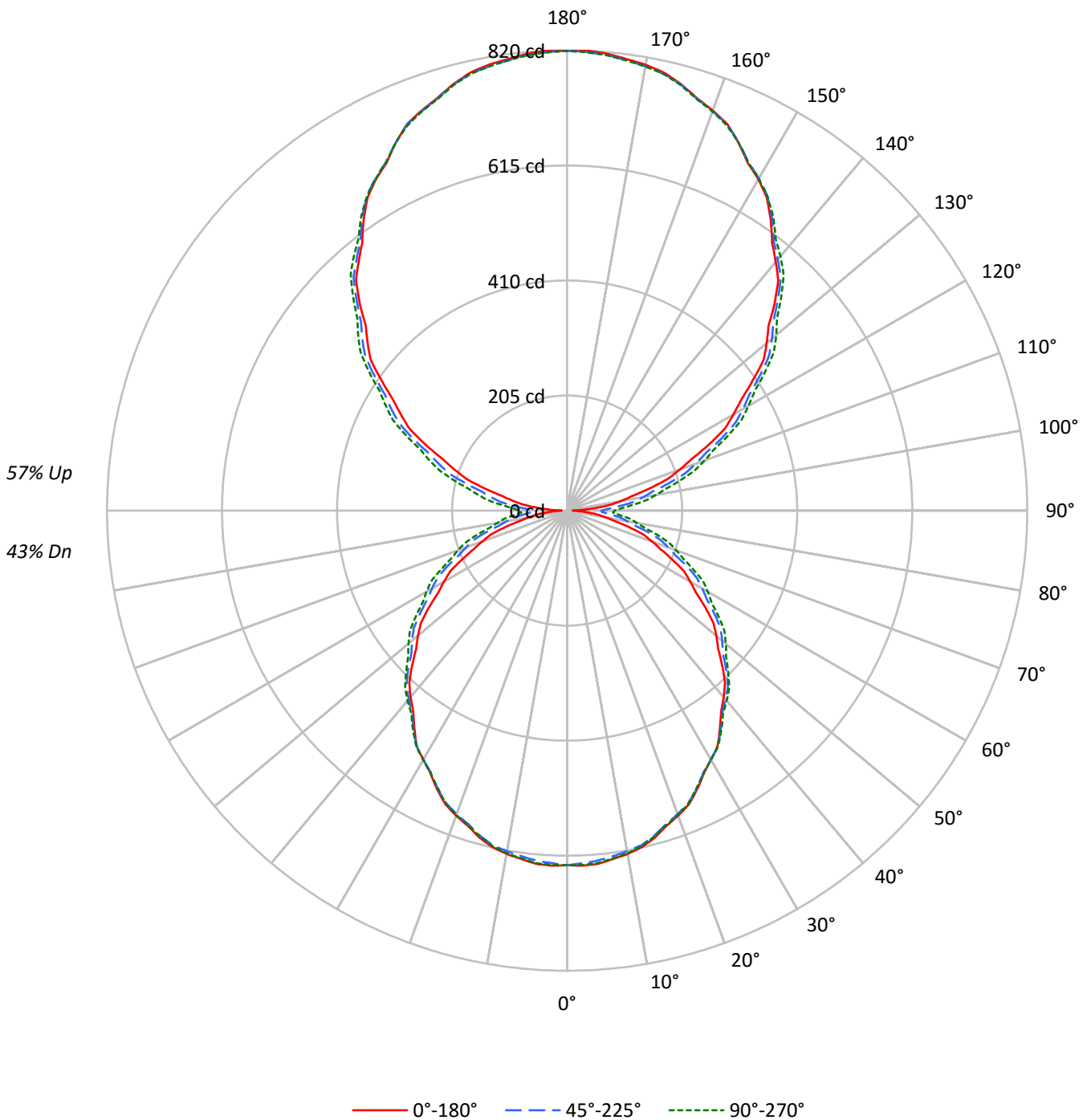
Input Watts (W): 38.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43
1	96	91	87	83	87	83	80	77	69	66	64	55	54	52	43	42	41	35
2	87	79	73	67	79	72	67	62	60	56	52	48	45	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	42	39	36	33	31	29	24
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	29	27	24	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	26	26	24	21	18
6	61	49	40	35	55	45	38	32	37	32	28	30	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	23	20	22	19	16	14
8	52	40	32	27	47	37	30	25	31	25	21	25	21	18	20	17	15	12
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.4
10°-20°	169.6	4.0
20°-30°	252.2	5.9
30°-40°	298.8	7.0
40°-50°	308.9	7.3
50°-60°	284.6	6.7
60°-70°	230.0	5.4
70°-80°	154.0	3.6
80°-90°	81.7	1.9
90°-100°	99.7	2.3
100°-110°	195.1	4.6
110°-120°	296.6	7.0
120°-130°	373.7	8.8
130°-140°	410.2	9.7
140°-150°	397.8	9.4
150°-160°	333.2	7.8
160°-170°	221.5	5.2
170°-180°	77.5	1.8
0°-30°	481.6	11.3
0°-40°	780.4	18.4
0°-60°	1373.8	32.4
0°-90°	1839.6	43.3
90°-120°	591.4	13.9
90°-150°	1773.1	41.8
90°-180°	2405.0	56.7
0°-180°	4244.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	36	61	78	85	9
95°	50	68	94	112	118	51
105°	151	165	186	202	209	161
115°	278	286	303	313	316	275
125°	404	407	420	428	431	361
135°	523	526	531	539	540	403
145°	632	634	636	639	640	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.5	24.1	28.7	33.3	38.0	42.7	47.6	52.5	57.4	62.3	65.6
90°	10.5	16.1	21.6	27.1	32.7	38.3	43.9	49.7	55.4	61.0	64.9
92.5°	24.4	29.2	34.1	39.0	43.8	49.2	55.3	61.3	67.3	73.3	77.3
95°	49.5	53.3	57.2	61.1	65.0	70.0	76.0	82.1	88.2	94.3	98.3
97.5°	76.1	79.5	82.8	86.2	89.5	94.4	100.9	107.4	113.8	120.3	124.1
100°	96.0	99.0	101.8	104.8	107.6	112.2	118.5	124.7	130.9	137.2	141.4
102.5°	117.5	120.7	124.0	127.2	130.4	134.7	139.9	145.1	150.3	155.6	159.8
105°	150.9	153.8	156.8	159.6	162.6	166.5	171.5	176.5	181.5	186.5	190.0
107.5°	187.9	190.5	193.1	195.7	198.3	201.9	206.4	211.1	215.7	220.3	223.5
110°	213.4	215.8	218.2	220.5	222.9	226.2	230.5	234.7	239.0	243.3	246.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	239.9	241.7	243.4	245.0	246.7	249.7	254.0	258.3	262.5	266.8	269.5
115°	278.5	280.1	281.5	283.1	284.6	287.3	291.1	295.1	298.9	302.7	305.1
117.5°	317.2	318.0	318.9	319.8	320.7	322.9	326.6	330.3	333.9	337.5	340.0
120°	341.6	342.8	343.9	345.0	346.1	348.3	351.6	354.9	358.2	361.6	363.9
122.5°	367.6	368.1	368.5	369.0	369.4	371.4	374.8	378.2	381.6	385.1	387.2
125°	403.5	404.2	404.9	405.6	406.3	408.1	411.0	413.9	416.8	419.7	421.7
127.5°	441.1	441.5	441.8	442.1	442.5	443.8	446.3	448.7	451.2	453.6	455.5
130°	464.1	464.6	465.2	465.8	466.4	467.7	469.9	472.1	474.3	476.5	478.3
132.5°	486.5	487.6	488.8	489.9	491.1	492.4	493.7	495.2	496.6	498.1	499.9
135°	522.8	523.4	524.2	524.9	525.6	526.5	527.6	528.7	529.8	530.9	532.7
137.5°	556.8	557.5	558.2	558.9	559.6	560.4	561.2	561.9	562.7	563.5	565.3
140°	578.2	578.9	579.6	580.3	581.1	581.7	582.3	582.8	583.3	583.9	585.7
142.5°	600.1	600.6	601.1	601.6	602.1	602.6	603.2	603.7	604.3	604.9	606.3
145°	632.4	632.8	633.2	633.7	634.1	634.5	635.0	635.4	635.9	636.3	636.9
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	665.1
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	68.9	72.2	75.5	77.7	78.7	79.7	80.8	81.9
90°	68.7	72.6	76.5	79.2	80.6	81.9	83.3	84.7
92.5°	81.3	85.3	89.3	91.9	93.2	94.4	95.7	97.0
95°	102.3	106.4	110.4	113.0	114.3	115.5	116.8	118.0
97.5°	127.9	131.8	135.6	138.0	139.2	140.2	141.4	142.5
100°	145.5	149.7	153.8	156.5	157.6	158.7	159.8	160.9
102.5°	164.0	168.1	172.3	175.0	176.2	177.4	178.6	179.9
105°	193.6	197.2	200.9	203.3	204.7	206.1	207.5	208.9
107.5°	226.7	229.8	232.9	234.9	235.7	236.5	237.4	238.2
110°	249.4	252.4	255.5	257.4	258.2	259.0	259.9	260.7





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CATALOG NUMBER: S125DIP-S610D810U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	272.2	274.9	277.7	279.4	280.1	280.8	281.5	282.2
115°	307.4	309.7	312.1	313.6	314.3	315.0	315.7	316.3
117.5°	342.4	344.9	347.3	348.8	349.1	349.5	349.8	350.3
120°	366.2	368.6	370.9	372.2	372.5	372.8	373.0	373.2
122.5°	389.3	391.4	393.5	394.8	395.2	395.5	395.9	396.2
125°	423.5	425.5	427.4	428.6	429.2	429.7	430.2	430.8
127.5°	457.4	459.3	461.1	462.4	462.9	463.4	463.9	464.4
130°	480.1	481.9	483.7	484.9	485.2	485.6	486.0	486.4
132.5°	501.7	503.4	505.2	506.2	506.4	506.5	506.7	506.9
135°	534.5	536.3	538.1	539.0	539.2	539.2	539.4	539.5
137.5°	567.1	568.9	570.7	571.5	571.4	571.2	571.0	570.9
140°	587.5	589.3	591.1	592.0	591.8	591.7	591.5	591.3
142.5°	607.8	609.3	610.7	611.4	611.2	611.1	610.9	610.7
145°	637.6	638.3	639.0	639.4	639.5	639.7	639.8	639.9
147.5°	665.7	666.3	666.8	666.8	666.0	665.3	664.6	663.9
150°	683.5	683.5	683.5	683.4	683.2	683.1	682.9	682.8
152.5°	700.4	700.7	701.1	701.1	700.6	700.1	699.6	699.1
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

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