

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: P333378-930

Luminaire Tested: **S125DIW-S610D770U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333378-930
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: S125DIW-S610D770U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4461.3 lumens
Efficiency: N/A
Efficacy: 118.7 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

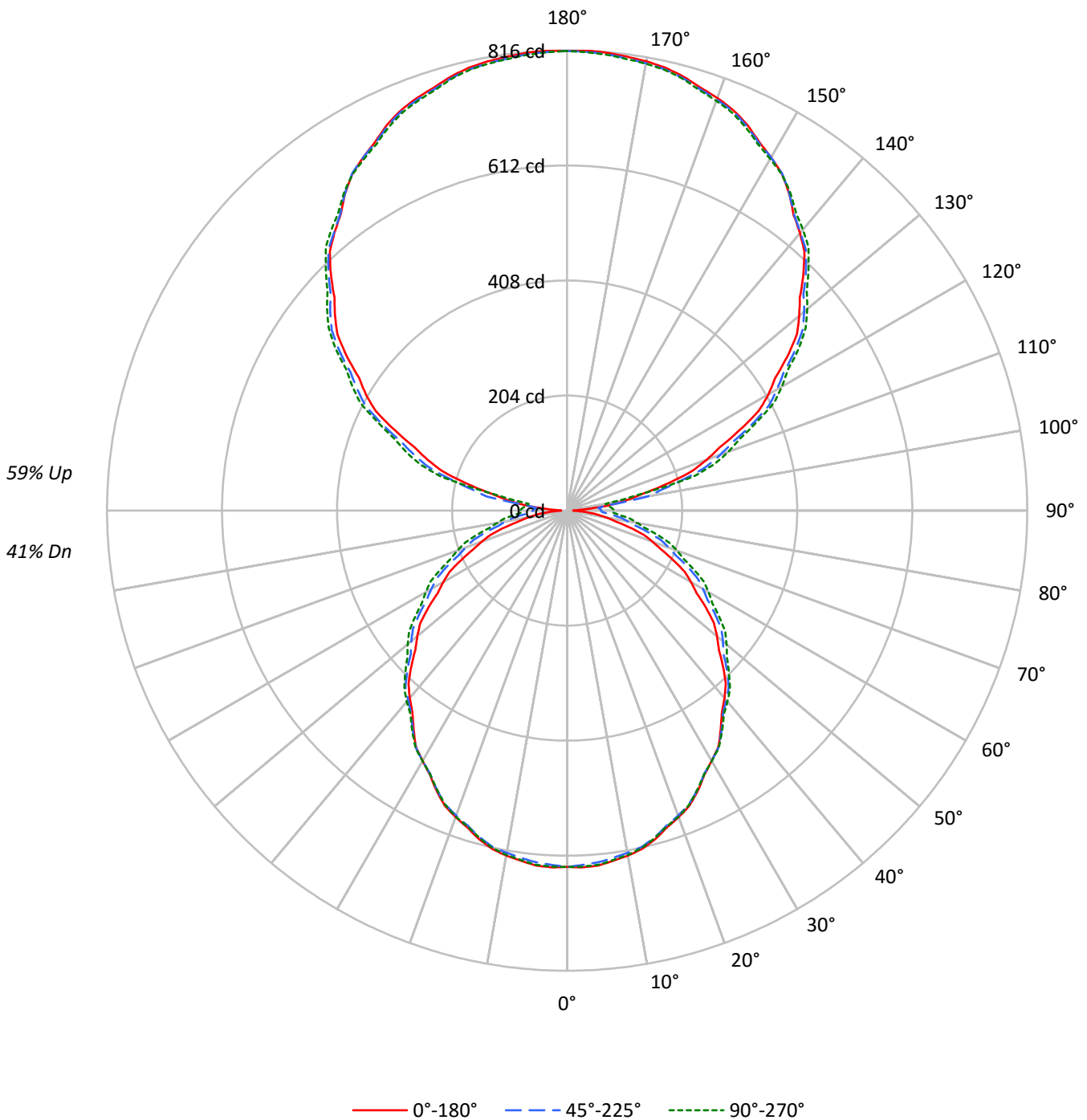
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	12	9

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	1.3
10°-20°	169.6	3.8
20°-30°	252.2	5.7
30°-40°	298.8	6.7
40°-50°	308.9	6.9
50°-60°	284.6	6.4
60°-70°	230.0	5.2
70°-80°	154.0	3.5
80°-90°	81.6	1.8
90°-100°	74.4	1.7
100°-110°	215.6	4.8
110°-120°	353.2	7.9
120°-130°	437.4	9.8
130°-140°	462.4	10.4
140°-150°	430.0	9.6
150°-160°	347.0	7.8
160°-170°	224.4	5.0
170°-180°	77.4	1.7
0°-30°	481.6	10.8
0°-40°	780.4	17.5
0°-60°	1373.8	30.8
0°-90°	1839.5	41.2
90°-120°	643.2	14.4
90°-150°	1973.1	44.2
90°-180°	2622.0	58.8
0°-180°	4461.3	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	35	60	77	84	8
95°	42	56	55	71	76	50
105°	183	196	214	226	230	194
115°	337	345	361	370	370	334
125°	477	481	493	500	502	426
135°	593	596	599	605	605	457
145°	686	687	687	690	689	429
155°	755	752	753	754	750	348
165°	797	793	794	797	793	225
175°	815	812	812	816	811	78
180°	815	815	815	815	815	



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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	37.9	42.6	47.5	52.4	57.3	62.1	65.5
90°	10.5	16.0	21.4	27.0	32.4	38.0	43.6	49.2	54.9	60.5	64.3
92.5°	18.3	21.5	24.9	28.2	31.6	36.0	41.6	47.2	52.8	58.5	62.2
95°	42.5	45.7	48.8	52.0	55.2	56.6	56.2	55.8	55.3	54.9	58.6
97.5°	79.2	83.2	87.1	91.1	95.0	94.2	88.6	83.0	77.5	71.8	70.9
100°	107.7	111.0	114.3	117.6	120.9	125.0	130.0	134.9	139.8	144.8	127.7
102.5°	136.6	139.9	143.1	146.3	149.4	153.3	157.9	162.6	167.1	171.8	170.8
105°	183.2	185.9	188.7	191.4	194.1	197.5	201.7	205.9	209.9	214.1	216.9
107.5°	231.5	233.3	235.2	237.1	239.0	242.1	246.3	250.5	254.7	258.9	261.7
110°	262.9	264.6	266.2	267.8	269.5	272.4	276.5	280.6	284.8	288.9	291.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	292.9	294.5	296.1	297.8	299.5	302.2	306.1	310.1	313.9	317.8	319.8
115°	337.2	338.8	340.5	342.1	343.7	346.4	350.1	353.8	357.5	361.3	363.2
117.5°	383.1	383.7	384.3	384.9	385.5	387.8	391.7	395.6	399.4	403.3	405.0
120°	412.1	412.4	412.6	412.9	413.2	415.2	418.7	422.2	425.8	429.4	431.5
122.5°	437.2	437.9	438.6	439.3	440.0	442.0	445.2	448.5	451.7	454.9	456.9
125°	476.7	477.5	478.3	479.1	479.9	481.7	484.5	487.2	489.9	492.7	494.4
127.5°	513.9	514.5	514.9	515.5	516.0	517.4	519.6	521.7	523.9	526.1	527.8
130°	537.1	537.6	538.2	538.7	539.2	540.5	542.6	544.6	546.7	548.8	550.3
132.5°	559.8	560.5	561.3	562.1	562.8	563.8	565.0	566.1	567.4	568.5	570.4
135°	592.6	593.3	594.0	594.7	595.3	596.0	596.7	597.4	598.1	598.8	600.3
137.5°	622.9	623.5	624.0	624.6	625.3	625.7	625.8	626.1	626.3	626.6	628.2
140°	642.2	642.5	642.7	643.0	643.3	643.4	643.4	643.4	643.4	643.4	645.2
142.5°	660.1	660.1	660.1	660.2	660.2	660.4	660.6	660.8	661.0	661.3	662.6
145°	686.3	686.4	686.6	686.6	686.8	686.9	686.9	686.9	686.9	686.9	687.7
147.5°	708.7	708.6	708.5	708.5	708.4	708.5	708.7	708.7	708.9	709.1	709.5
150°	723.1	722.8	722.6	722.3	722.0	722.0	722.3	722.6	722.8	723.1	723.4
152.5°	737.1	736.5	736.0	735.4	734.7	734.6	734.9	735.2	735.4	735.6	736.0
155°	755.1	754.3	753.5	752.7	752.0	751.6	752.0	752.2	752.4	752.7	753.1
157.5°	769.0	768.6	768.1	767.6	767.1	766.9	766.9	767.0	767.0	767.0	767.4
160°	778.7	777.9	777.1	776.2	775.5	775.1	775.3	775.4	775.5	775.7	776.2
162.5°	786.4	785.6	784.8	784.0	783.2	782.9	783.0	783.2	783.3	783.4	784.2
165°	796.8	796.0	795.2	794.4	793.6	793.3	793.4	793.5	793.7	793.8	794.6
167.5°	804.5	803.7	802.9	802.1	801.2	800.9	801.0	801.1	801.3	801.4	802.3
170°	808.9	808.0	807.0	806.1	805.1	804.7	804.9	805.0	805.1	805.3	806.3
172.5°	811.8	810.9	809.9	808.9	808.0	807.7	808.0	808.2	808.5	808.7	809.6
175°	815.0	814.2	813.3	812.5	811.7	811.4	811.5	811.6	811.8	812.0	813.0
177.5°	816.4	815.7	815.1	814.5	813.8	813.5	813.7	813.8	813.8	814.0	814.7
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0



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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°	68.7	72.1	75.3	77.5	78.6	79.6	80.6	81.7
90°	68.2	72.0	75.8	78.4	79.8	81.1	82.5	83.9
92.5°	66.0	69.6	73.4	75.8	77.0	78.1	79.2	80.5
95°	62.3	66.0	69.7	72.0	73.0	73.9	74.9	75.9
97.5°	70.0	69.1	68.2	68.3	69.2	70.2	71.1	72.0
100°	110.6	93.4	76.3	67.9	68.2	68.5	68.7	69.1
102.5°	169.7	168.8	167.8	163.1	154.8	146.5	138.2	129.9
105°	219.6	222.3	225.1	226.9	227.7	228.5	229.4	230.2
107.5°	264.5	267.3	269.9	271.6	272.1	272.5	273.0	273.4
110°	293.3	295.5	297.7	299.4	300.5	301.6	302.7	303.8



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CATALOG NUMBER: S125DIW-S610D770U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	321.8	323.8	325.8	327.2	328.0	328.7	329.5	330.3
115°	365.2	367.0	369.0	370.0	370.0	370.1	370.1	370.1
117.5°	406.6	408.3	409.9	411.0	411.6	412.2	412.8	413.4
120°	433.6	435.6	437.7	438.8	439.0	439.1	439.3	439.4
122.5°	458.9	460.8	462.8	463.8	463.8	463.9	464.0	464.0
125°	496.0	497.7	499.4	500.3	500.6	500.9	501.2	501.5
127.5°	529.6	531.3	533.0	533.9	533.6	533.5	533.3	533.0
130°	551.8	553.3	554.9	555.6	555.6	555.7	555.7	555.7
132.5°	572.3	574.1	575.9	576.8	576.7	576.6	576.5	576.4
135°	601.9	603.3	604.9	605.6	605.4	605.4	605.2	605.1
137.5°	629.9	631.5	633.2	634.0	633.9	633.7	633.6	633.4
140°	646.9	648.7	650.5	651.3	651.0	650.8	650.5	650.3
142.5°	664.0	665.3	666.7	667.2	666.9	666.7	666.4	666.2
145°	688.5	689.3	690.2	690.5	690.2	689.9	689.7	689.4
147.5°	709.9	710.2	710.6	710.5	709.7	709.0	708.3	707.6
150°	723.7	723.9	724.2	723.8	722.9	721.9	721.1	720.1
152.5°	736.2	736.5	736.8	736.5	735.5	734.5	733.6	732.6
155°	753.5	753.9	754.3	754.0	752.9	751.9	750.8	749.7
157.5°	767.8	768.3	768.7	768.3	767.3	766.2	765.2	764.1
160°	776.7	777.3	777.8	777.6	776.5	775.4	774.4	773.2
162.5°	784.9	785.6	786.4	786.2	785.1	783.8	782.7	781.5
165°	795.4	796.2	797.0	796.9	795.8	794.8	793.7	792.6
167.5°	803.3	804.3	805.3	805.2	804.0	802.7	801.5	800.3
170°	807.4	808.5	809.6	809.5	808.3	807.1	805.8	804.7
172.5°	810.6	811.5	812.5	812.4	811.2	810.0	808.8	807.6
175°	814.1	815.1	816.2	816.1	815.0	813.8	812.5	811.3
177.5°	815.5	816.2	817.0	816.9	816.0	815.2	814.3	813.5
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0

(END OF REPORT)