

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: P333378-935

Luminaire Tested: **S125DIW-S610D770U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333378-935
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-S610D770U935-4F0-1E-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: 4711.3 lumens
Efficiency: N/A
Efficacy: 125.3 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

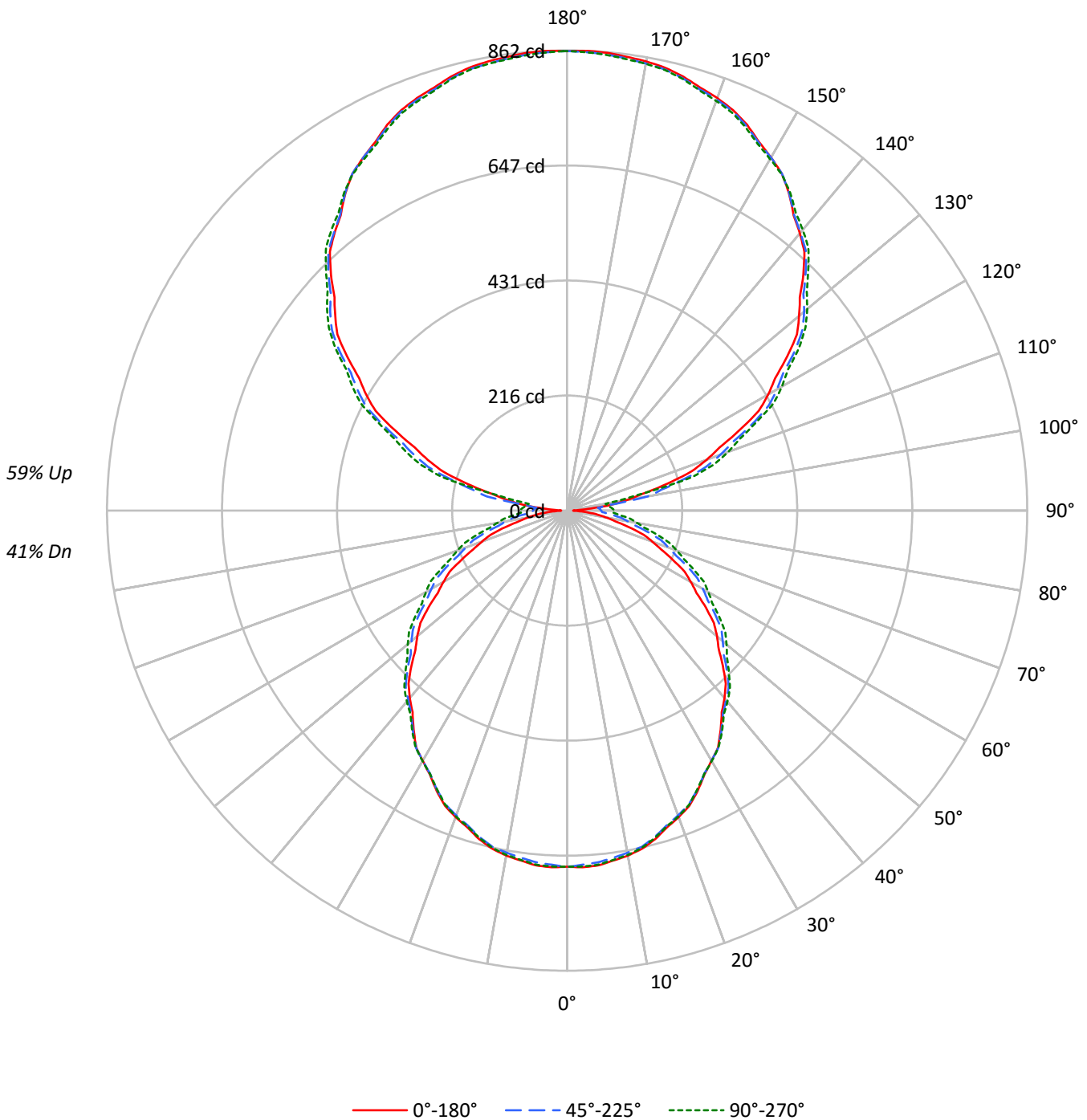
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.3
10°-20°	179.1	3.8
20°-30°	266.4	5.7
30°-40°	315.5	6.7
40°-50°	326.2	6.9
50°-60°	300.5	6.4
60°-70°	242.9	5.2
70°-80°	162.7	3.5
80°-90°	86.2	1.8
90°-100°	78.6	1.7
100°-110°	227.7	4.8
110°-120°	373.0	7.9
120°-130°	461.9	9.8
130°-140°	488.4	10.4
140°-150°	454.1	9.6
150°-160°	366.4	7.8
160°-170°	237.0	5.0
170°-180°	81.7	1.7
0°-30°	508.6	10.8
0°-40°	824.1	17.5
0°-60°	1450.8	30.8
0°-90°	1942.6	41.2
90°-120°	679.3	14.4
90°-150°	2083.6	44.2
90°-180°	2769.0	58.8
0°-180°	4711.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	37	64	81	89	9
95°	45	59	58	75	80	53
105°	194	207	226	239	243	205
115°	356	364	382	390	391	353
125°	503	508	520	528	530	449
135°	626	629	632	639	639	482
145°	725	725	725	729	728	453
155°	798	794	795	796	792	367
165°	842	838	838	842	837	238
175°	861	857	858	862	857	82
180°	861	861	861	861	861	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.4	30.3	35.2	40.0	45.0	50.2	55.4	60.5	65.6	69.1
90°	11.1	16.9	22.6	28.5	34.3	40.1	46.1	52.0	57.9	63.9	67.9
92.5°	19.3	22.7	26.3	29.8	33.3	38.0	43.9	49.9	55.8	61.7	65.7
95°	44.9	48.2	51.6	54.9	58.3	59.8	59.3	58.9	58.4	57.9	61.9
97.5°	83.6	87.8	92.0	96.2	100.3	99.4	93.6	87.6	81.8	75.9	74.9
100°	113.7	117.2	120.7	124.2	127.7	132.0	137.2	142.4	147.7	152.9	134.8
102.5°	144.3	147.7	151.1	154.5	157.8	161.9	166.8	171.7	176.5	181.4	180.4
105°	193.5	196.3	199.2	202.2	205.0	208.6	213.0	217.4	221.7	226.1	229.0
107.5°	244.4	246.4	248.4	250.4	252.4	255.6	260.1	264.5	269.0	273.5	276.4
110°	277.7	279.4	281.1	282.8	284.6	287.7	292.1	296.4	300.7	305.1	307.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	309.3	311.0	312.7	314.5	316.2	319.2	323.3	327.4	331.5	335.6	337.8
115°	356.1	357.8	359.6	361.3	363.0	365.8	369.7	373.7	377.5	381.5	383.6
117.5°	404.6	405.2	405.9	406.5	407.1	409.5	413.6	417.8	421.8	425.9	427.7
120°	435.1	435.5	435.8	436.1	436.4	438.4	442.1	445.9	449.7	453.5	455.6
122.5°	461.7	462.4	463.2	463.9	464.7	466.7	470.2	473.6	477.0	480.4	482.5
125°	503.4	504.3	505.1	505.9	506.8	508.7	511.6	514.5	517.4	520.3	522.1
127.5°	542.7	543.3	543.8	544.4	544.9	546.4	548.7	551.0	553.3	555.6	557.4
130°	567.2	567.7	568.3	568.9	569.5	570.8	573.0	575.1	577.4	579.5	581.2
132.5°	591.2	591.9	592.8	593.6	594.3	595.4	596.7	597.9	599.2	600.4	602.4
135°	625.9	626.5	627.3	628.0	628.7	629.4	630.2	630.9	631.6	632.3	634.0
137.5°	657.8	658.4	659.0	659.6	660.3	660.7	660.9	661.2	661.4	661.7	663.4
140°	678.2	678.5	678.7	679.1	679.3	679.4	679.5	679.5	679.5	679.5	681.4
142.5°	697.1	697.2	697.2	697.2	697.2	697.4	697.7	697.8	698.1	698.4	699.7
145°	724.8	724.9	725.0	725.1	725.3	725.4	725.4	725.4	725.4	725.4	726.3
147.5°	748.4	748.3	748.2	748.2	748.1	748.2	748.4	748.5	748.6	748.8	749.2
150°	763.6	763.4	763.1	762.8	762.5	762.5	762.8	763.1	763.4	763.6	764.0
152.5°	778.4	777.8	777.2	776.6	775.9	775.8	776.1	776.4	776.6	776.9	777.2
155°	797.5	796.6	795.7	794.9	794.1	793.8	794.1	794.4	794.6	794.9	795.3
157.5°	812.1	811.7	811.1	810.6	810.1	809.9	809.9	809.9	809.9	809.9	810.5
160°	822.3	821.5	820.6	819.8	819.0	818.6	818.7	818.9	819.0	819.2	819.8
162.5°	830.5	829.7	828.8	827.9	827.1	826.7	826.9	827.1	827.2	827.3	828.1
165°	841.5	840.6	839.8	839.0	838.1	837.8	837.8	838.0	838.2	838.3	839.1
167.5°	849.6	848.8	847.9	847.1	846.1	845.8	845.9	846.0	846.2	846.4	847.3
170°	854.3	853.3	852.2	851.3	850.2	849.8	850.0	850.2	850.2	850.4	851.5
172.5°	857.3	856.4	855.3	854.3	853.3	853.0	853.3	853.5	853.8	854.0	855.0
175°	860.7	859.8	858.9	858.1	857.2	856.9	857.0	857.1	857.3	857.5	858.6
177.5°	862.1	861.4	860.8	860.1	859.5	859.1	859.3	859.4	859.5	859.6	860.4
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.6	76.1	79.6	81.9	83.0	84.0	85.2	86.3
90°	72.0	76.0	80.1	82.8	84.3	85.7	87.1	88.6
92.5°	69.7	73.5	77.5	80.1	81.3	82.5	83.7	85.0
95°	65.8	69.7	73.6	76.0	77.1	78.1	79.1	80.2
97.5°	74.0	73.0	72.1	72.2	73.1	74.1	75.1	76.0
100°	116.8	98.7	80.6	71.7	72.0	72.3	72.6	72.9
102.5°	179.3	178.2	177.2	172.2	163.5	154.7	145.9	137.2
105°	231.9	234.8	237.7	239.6	240.5	241.3	242.3	243.1
107.5°	279.3	282.2	285.1	286.8	287.3	287.7	288.3	288.7
110°	309.8	312.1	314.4	316.2	317.4	318.5	319.7	320.8



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CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	339.8	342.0	344.1	345.5	346.4	347.2	348.0	348.8
115°	385.6	387.6	389.7	390.7	390.7	390.8	390.8	390.8
117.5°	429.4	431.2	432.9	434.0	434.7	435.3	435.9	436.5
120°	457.9	460.0	462.2	463.4	463.6	463.7	463.9	464.1
122.5°	484.6	486.6	488.7	489.8	489.8	489.9	490.0	490.0
125°	523.8	525.6	527.4	528.4	528.7	529.0	529.3	529.6
127.5°	559.3	561.1	562.9	563.8	563.5	563.4	563.2	562.9
130°	582.7	584.4	586.0	586.8	586.8	586.9	586.9	586.9
132.5°	604.3	606.2	608.2	609.2	609.1	608.9	608.8	608.7
135°	635.6	637.1	638.8	639.6	639.4	639.3	639.1	639.0
137.5°	665.2	666.9	668.7	669.5	669.4	669.3	669.1	668.9
140°	683.2	685.1	687.0	687.8	687.5	687.3	687.0	686.7
142.5°	701.2	702.6	704.0	704.6	704.3	704.0	703.8	703.5
145°	727.1	728.0	728.8	729.2	728.8	728.6	728.3	728.1
147.5°	749.7	750.0	750.4	750.3	749.5	748.7	748.0	747.3
150°	764.2	764.5	764.8	764.4	763.4	762.4	761.5	760.4
152.5°	777.5	777.7	778.1	777.7	776.7	775.7	774.7	773.7
155°	795.7	796.2	796.6	796.3	795.1	794.0	792.9	791.7
157.5°	810.9	811.3	811.8	811.4	810.3	809.2	808.0	806.9
160°	820.3	820.9	821.4	821.1	820.0	818.9	817.8	816.6
162.5°	828.9	829.7	830.5	830.3	829.1	827.8	826.6	825.3
165°	840.0	840.9	841.7	841.5	840.4	839.3	838.2	837.0
167.5°	848.3	849.4	850.4	850.3	849.0	847.7	846.4	845.2
170°	852.6	853.9	855.0	854.9	853.6	852.3	851.0	849.8
172.5°	856.0	857.0	858.1	857.9	856.7	855.4	854.1	852.8
175°	859.7	860.8	861.9	861.9	860.7	859.4	858.1	856.8
177.5°	861.2	861.9	862.8	862.7	861.8	860.9	860.0	859.1
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7

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