

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: P333525-940

Luminaire Tested: **S125RDIP-S610D365U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333525-940  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S610D365U940-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3292.3 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Direct

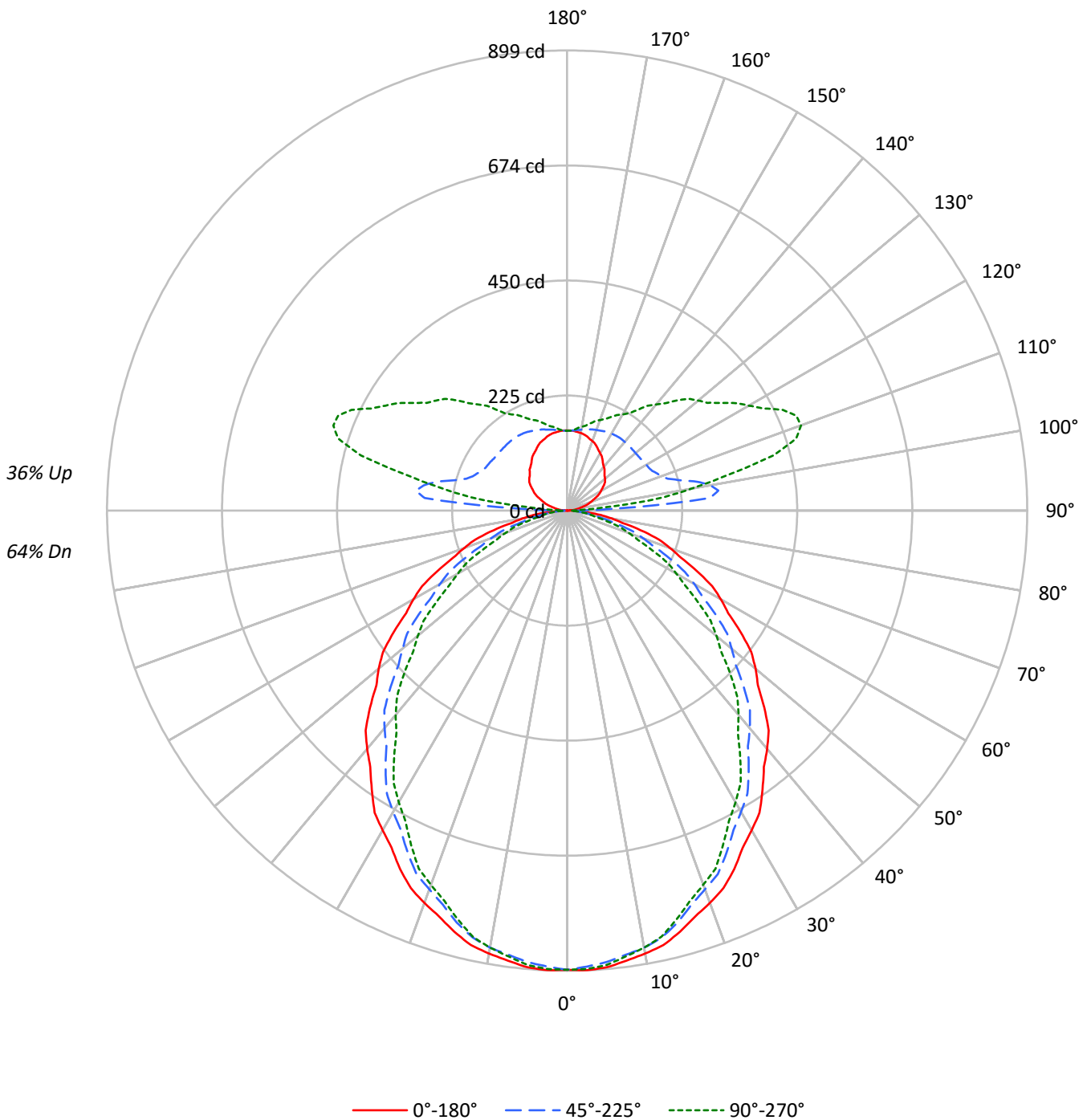
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	92	85	79	74	87	80	75	70	71	67	63	63	59	57	55	52	50	46
3	85	75	68	62	79	71	64	59	63	58	53	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34
5	71	60	51	45	67	56	49	43	50	44	40	45	40	36	39	36	33	30
6	66	54	45	39	62	51	43	38	45	39	35	41	36	32	36	32	29	26
7	61	49	40	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	40	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	26	23	29	24	21	26	22	19	17

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

	0°	45°	90°
0°	5794	5794	5794
5°	5806	5741	5776
10°	5762	5687	5687
15°	5695	5572	5526
20°	5606	5411	5346
25°	5504	5253	5137
30°	5376	5068	4906
35°	5245	4877	4647
40°	5123	4678	4392
45°	4975	4455	4116
50°	4827	4214	3826
55°	4654	3983	3518
60°	4481	3702	3185
65°	4276	3376	2806
70°	4043	2968	2417
75°	3721	2500	2011
80°	3277	1967	1689
85°	2764	1608	1504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	2.6
10°-20°	235.7	7.2
20°-30°	341.8	10.4
30°-40°	389.6	11.8
40°-50°	379.7	11.5
50°-60°	319.6	9.7
60°-70°	224.1	6.8
70°-80°	115.2	3.5
80°-90°	30.0	0.9
90°-100°	113.3	3.4
100°-110°	243.6	7.4
110°-120°	228.6	6.9
120°-130°	185.2	5.6
130°-140°	148.7	4.5
140°-150°	112.2	3.4
150°-160°	79.0	2.4
160°-170°	46.5	1.4
170°-180°	15.1	0.5
0°-30°	661.9	20.1
0°-40°	1051.5	31.9
0°-60°	1750.9	53.2
0°-90°	2120.1	64.4
90°-120°	585.4	17.8
90°-150°	1031.5	31.3
90°-180°	1172.0	35.6
0°-180°	3292.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	896	893	886	892	891	85
15°	852	847	833	832	826	240
25°	772	761	737	728	721	355
35°	665	648	619	600	589	416
45°	545	524	488	462	451	420
55°	413	391	354	324	312	370
65°	280	256	221	195	184	277
75°	149	128	100	86	81	158
85°	37	26	22	21	20	42
90°	0	3	5	7	7	2
95°	10	31	279	127	74	11
105°	36	50	228	450	418	38
115°	64	77	183	395	465	63
125°	88	103	176	314	366	78
135°	103	124	175	264	304	80
145°	120	138	175	218	240	75
155°	137	148	171	193	201	63
165°	150	154	164	174	176	42
175°	156	156	157	159	158	15
180°	156	156	156	156	156	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	898.7	898.3	898.0	897.6	897.2	896.4	895.2	894.0	892.8	891.6	892.8
5°	895.6	895.1	894.5	893.9	893.2	892.2	890.5	888.9	887.2	885.5	887.0
7.5°	886.9	886.3	885.7	885.1	884.6	883.3	881.3	879.3	877.4	875.3	876.4
10°	878.7	878.2	877.8	877.4	876.9	875.7	873.5	871.5	869.3	867.2	867.6
12.5°	869.5	869.0	868.3	867.8	867.2	865.5	862.7	859.9	857.0	854.2	854.5
15°	851.7	850.7	849.8	848.9	848.0	846.0	842.8	839.6	836.5	833.3	833.2
17.5°	831.4	830.1	828.7	827.3	825.9	823.2	819.2	815.3	811.3	807.4	806.6
20°	815.7	814.2	812.7	811.2	809.7	806.6	801.7	796.9	792.1	787.3	786.5
22.5°	798.3	796.8	795.4	793.9	792.4	789.1	784.0	779.0	773.9	768.8	767.4
25°	772.4	770.1	767.9	765.6	763.3	759.4	753.9	748.2	742.7	737.1	735.2
27.5°	742.5	739.9	737.1	734.3	731.6	727.3	721.3	715.3	709.4	703.4	700.6
30°	720.9	718.0	715.2	712.3	709.4	704.8	698.5	692.2	685.9	679.6	676.1
32.5°	699.7	696.4	693.0	689.7	686.3	681.4	675.0	668.6	662.1	655.7	651.8
35°	665.3	661.7	658.1	654.5	650.9	645.7	638.9	632.1	625.4	618.6	614.2
37.5°	631.6	627.1	622.8	618.4	614.0	608.3	601.3	594.3	587.4	580.3	575.2
40°	607.7	603.2	598.7	594.1	589.7	583.8	576.6	569.4	562.1	554.9	549.2
42.5°	582.8	578.2	573.5	568.9	564.3	558.2	550.7	543.2	535.8	528.3	522.8
45°	544.7	540.4	536.0	531.6	527.3	520.9	512.6	504.4	496.1	487.8	481.8
47.5°	505.3	500.7	496.1	491.5	486.9	480.4	472.1	463.7	455.4	447.0	440.9
50°	480.4	475.4	470.4	465.5	460.5	453.7	445.1	436.6	427.9	419.4	413.0
52.5°	453.3	448.2	443.1	438.0	432.9	426.3	418.2	410.1	402.0	393.9	387.1
55°	413.3	408.5	403.7	398.9	394.0	387.4	379.0	370.5	362.1	353.7	346.9
57.5°	372.9	367.7	362.6	357.5	352.3	345.6	337.5	329.4	321.3	313.2	306.5
60°	346.9	341.6	336.4	331.1	325.8	319.1	310.9	302.8	294.7	286.6	280.0
62.5°	319.2	314.2	309.2	304.2	299.2	292.5	284.3	276.0	267.8	259.5	253.3
65°	279.8	274.7	269.6	264.5	259.3	252.8	244.8	236.8	228.8	220.9	214.8
67.5°	240.7	235.5	230.4	225.3	220.2	213.8	206.2	198.5	190.8	183.2	177.7
70°	214.1	209.0	203.8	198.8	193.6	187.3	179.8	172.3	164.7	157.2	152.5
72.5°	188.1	183.1	178.1	173.1	168.1	162.0	155.0	147.9	140.9	133.8	129.6
75°	149.1	144.5	140.0	135.5	131.0	125.6	119.2	112.9	106.6	100.2	96.9
77.5°	110.3	106.6	103.1	99.4	95.9	91.5	86.4	81.4	76.3	71.2	68.9
80°	88.1	84.4	80.9	77.2	73.7	69.7	65.5	61.3	57.1	52.9	51.5
82.5°	66.4	63.1	59.9	56.6	53.4	50.3	47.4	44.5	41.6	38.8	38.2
85°	37.3	34.5	31.8	29.2	26.4	24.7	23.9	23.2	22.5	21.7	21.5
87.5°	12.6	11.8	11.1	10.3	9.6	9.3	9.2	9.2	9.1	9.1	9.2
90°	0.4	0.6	1.2	1.9	2.5	3.1	3.5	4.1	4.4	5.1	5.4
92.5°	3.8	4.6	7.3	11.2	16.7	25.9	43.1	71.9	103.3	101.6	82.2
95°	10.4	10.7	13.2	16.7	23.6	37.8	71.5	140.9	227.8	279.2	273.2
97.5°	17.3	17.7	19.4	22.9	29.2	39.3	61.6	112.4	203.5	298.2	345.7
100°	22.0	22.6	24.0	27.4	33.4	42.9	61.2	102.1	181.6	284.5	363.4
102.5°	27.4	27.7	28.7	32.5	38.0	47.2	63.4	97.8	164.9	260.6	352.8
105°	35.6	35.6	37.2	40.3	45.4	54.2	68.0	96.1	148.7	228.5	319.0
107.5°	43.7	44.3	45.8	48.4	53.7	61.6	75.0	99.0	142.0	206.3	284.4
110°	49.5	50.1	51.4	54.2	58.9	67.1	80.1	101.8	139.9	196.0	264.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	55.3	55.9	56.9	59.7	64.5	72.4	84.8	105.3	139.9	189.9	250.1
115°	63.7	64.3	65.3	68.0	72.8	80.7	92.4	110.6	140.9	183.4	234.2
117.5°	71.2	72.1	73.2	76.0	81.4	89.0	100.0	116.6	142.9	180.2	224.6
120°	76.2	77.2	78.5	81.3	86.7	94.5	105.6	120.7	145.0	178.7	219.4
122.5°	81.6	82.2	83.3	86.1	91.9	99.9	110.8	125.2	146.7	177.5	214.8
125°	88.3	88.9	90.4	93.3	99.2	107.5	117.9	131.4	149.7	175.8	208.7
127.5°	93.5	94.4	96.4	100.0	106.4	114.6	124.6	137.1	153.0	175.1	203.0
130°	96.8	97.7	100.2	104.3	110.9	119.1	128.9	140.9	155.1	174.6	199.2
132.5°	99.2	100.5	103.5	108.1	114.9	123.1	133.0	144.2	157.3	174.6	196.2
135°	103.3	104.6	108.4	113.4	120.1	128.6	138.3	148.7	160.4	174.6	192.5
137.5°	108.5	109.5	113.0	118.1	124.6	133.3	142.2	152.1	163.3	175.0	189.3
140°	111.6	112.5	116.3	121.4	127.3	135.8	145.0	154.4	164.5	175.2	187.8
142.5°	115.1	115.7	119.3	124.4	130.1	138.1	146.7	155.7	165.2	175.5	186.5
145°	120.4	121.0	124.1	128.6	134.3	141.5	149.7	157.6	166.0	175.2	184.7
147.5°	125.9	126.3	129.0	133.1	138.0	144.4	151.6	158.7	166.4	174.4	182.7
150°	129.2	129.8	132.1	136.2	140.5	145.9	152.8	159.4	166.4	173.6	181.2
152.5°	132.8	133.1	135.1	138.7	142.9	147.7	154.1	160.0	166.1	172.6	179.4
155°	137.4	137.4	139.3	142.4	145.6	150.0	155.3	160.4	165.4	170.9	176.5
157.5°	141.6	141.5	143.0	145.7	148.5	151.9	156.4	160.7	164.6	168.9	173.7
160°	144.4	144.0	145.3	147.5	150.0	152.8	156.9	160.7	163.9	167.6	171.5
162.5°	146.6	146.3	147.6	149.5	151.5	153.8	157.5	160.5	163.1	166.1	169.4
165°	150.0	149.4	150.3	151.9	153.2	155.1	157.6	160.1	162.0	163.9	166.4
167.5°	152.3	151.9	152.6	153.4	154.3	155.5	157.6	159.3	160.2	161.7	163.5
170°	153.8	153.5	153.8	154.4	155.1	156.0	157.6	158.8	159.4	160.4	161.7
172.5°	154.8	154.3	154.5	155.2	155.5	156.0	157.3	158.4	158.5	158.9	159.9
175°	156.0	155.3	155.7	156.0	156.0	156.0	156.9	157.6	157.3	157.3	157.6
177.5°	156.6	156.0	156.0	156.3	156.0	156.0	156.6	156.9	156.3	156.3	156.6
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	894.0	895.2	896.4	897.0	896.9	896.7	896.6	896.5
5°	888.5	890.0	891.5	892.2	891.8	891.5	891.3	890.9
7.5°	877.4	878.5	879.6	879.9	879.6	879.2	879.0	878.6
10°	868.1	868.5	869.1	869.1	868.5	868.1	867.6	867.2
12.5°	854.9	855.2	855.5	855.3	854.6	854.0	853.3	852.6
15°	833.0	832.9	832.8	832.0	830.6	829.3	828.0	826.5
17.5°	805.8	805.0	804.3	803.3	802.3	801.1	800.0	798.9
20°	785.8	785.0	784.3	783.2	781.9	780.5	779.2	777.8
22.5°	765.9	764.4	762.9	761.6	760.5	759.4	758.3	757.2
25°	733.3	731.3	729.3	727.5	725.9	724.2	722.6	720.9
27.5°	697.9	695.2	692.4	690.3	688.7	687.1	685.5	683.9
30°	672.6	669.1	665.7	663.3	661.9	660.6	659.2	657.9
32.5°	648.0	644.3	640.4	637.7	635.9	634.2	632.5	630.8
35°	609.8	605.5	601.1	597.9	595.8	593.6	591.6	589.4
37.5°	569.9	564.6	559.4	555.7	553.7	551.7	549.7	547.6
40°	543.4	537.7	532.0	528.2	526.5	524.6	522.8	521.0
42.5°	517.4	511.8	506.4	502.3	499.7	497.0	494.4	491.8
45°	475.7	469.8	463.7	459.6	457.4	455.0	452.8	450.6
47.5°	434.6	428.4	422.2	417.9	415.4	412.9	410.4	407.9
50°	406.7	400.4	394.0	389.8	387.5	385.3	383.0	380.8
52.5°	380.3	373.4	366.7	362.1	359.9	357.7	355.3	353.1
55°	340.1	333.3	326.5	322.0	319.6	317.2	314.8	312.4
57.5°	299.9	293.3	286.7	282.2	280.1	277.9	275.9	273.8
60°	273.3	266.7	260.1	255.7	253.4	251.1	248.9	246.6
62.5°	247.2	241.0	234.9	230.7	228.5	226.2	223.9	221.7
65°	208.8	202.8	196.8	192.6	190.4	188.2	185.8	183.6
67.5°	172.2	166.7	161.1	157.5	155.7	153.9	152.0	150.3
70°	147.8	143.2	138.5	135.3	133.5	131.7	129.8	128.0
72.5°	125.3	120.9	116.6	113.9	112.7	111.5	110.3	109.1
75°	93.6	90.3	87.0	84.8	83.8	82.8	81.7	80.6
77.5°	66.6	64.3	62.0	60.5	59.7	58.9	58.1	57.3
80°	50.1	48.8	47.4	46.6	46.3	46.0	45.7	45.4
82.5°	37.5	36.8	36.2	35.8	35.7	35.5	35.3	35.1
85°	21.4	21.2	21.0	21.0	20.8	20.6	20.5	20.3
87.5°	9.3	9.4	9.4	9.5	9.4	9.2	9.2	9.0
90°	5.7	6.0	6.3	7.0	7.0	7.0	7.2	7.2
92.5°	55.8	40.5	30.5	25.9	21.8	21.0	20.6	20.1
95°	226.6	178.7	139.9	113.4	91.0	81.6	79.1	74.1
97.5°	337.4	303.9	266.1	229.3	209.8	192.2	183.1	179.0
100°	387.6	372.2	339.7	306.9	285.2	262.5	250.8	245.8
102.5°	404.5	414.0	398.5	376.3	353.0	336.9	324.2	320.5
105°	394.6	437.7	451.6	448.2	438.0	427.7	421.3	417.6
107.5°	359.0	416.6	452.2	468.7	473.8	473.8	471.6	469.1
110°	332.8	392.7	437.1	463.9	478.0	484.0	486.2	486.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	312.1	369.0	413.9	445.5	466.2	476.5	482.0	484.3
115°	286.1	335.0	378.2	412.5	437.1	452.2	461.0	465.1
117.5°	269.4	311.5	348.7	380.2	404.7	420.4	429.2	431.7
120°	260.3	298.1	332.8	360.5	383.9	399.0	407.5	410.0
122.5°	253.5	288.6	319.4	345.4	366.2	380.0	388.6	390.8
125°	243.6	275.7	303.2	325.8	343.5	356.4	363.4	366.5
127.5°	233.5	263.5	289.1	310.3	326.4	337.8	344.3	345.7
130°	227.2	254.9	279.6	300.1	315.8	326.2	332.5	334.4
132.5°	220.9	246.9	269.2	288.9	304.7	315.0	320.8	323.0
135°	212.8	234.4	254.7	272.6	286.5	296.9	302.6	304.4
137.5°	205.8	223.4	240.1	255.4	267.8	277.2	282.5	284.5
140°	202.0	216.8	231.3	244.5	256.2	264.4	269.1	270.7
142.5°	198.8	211.2	223.7	235.2	245.1	252.1	256.5	257.9
145°	194.5	204.2	214.0	222.5	230.1	235.4	238.9	240.1
147.5°	190.4	198.3	205.9	212.3	218.3	222.6	224.5	225.2
150°	188.2	195.1	201.1	206.7	211.4	215.3	216.5	216.8
152.5°	185.7	191.8	197.2	201.7	205.6	208.7	209.9	210.3
155°	181.8	186.9	191.3	194.7	197.9	200.1	201.1	201.3
157.5°	178.1	182.2	185.7	188.3	190.8	192.6	193.5	193.4
160°	175.6	178.7	181.8	184.0	186.3	187.8	188.4	188.2
162.5°	172.7	175.7	178.3	180.3	182.0	183.2	183.4	183.3
165°	168.9	171.1	173.0	174.6	175.8	176.5	176.5	176.5
167.5°	165.2	166.7	168.2	169.3	170.0	170.5	170.2	170.1
170°	163.3	164.2	165.1	165.8	166.4	166.7	166.7	166.4
172.5°	161.0	161.9	162.6	163.0	163.1	163.7	163.2	162.8
175°	158.5	158.5	159.2	159.2	159.2	159.4	158.8	158.5
177.5°	156.9	157.0	157.0	157.0	156.9	157.0	156.3	156.3
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3

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