

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: P333530-830

Luminaire Tested: **S125RDIP-S610D590U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333530-830
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: S125RDIP-S610D590U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4169.5 lumens
Efficiency: N/A
Efficacy: 127.1 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: General Diffuse

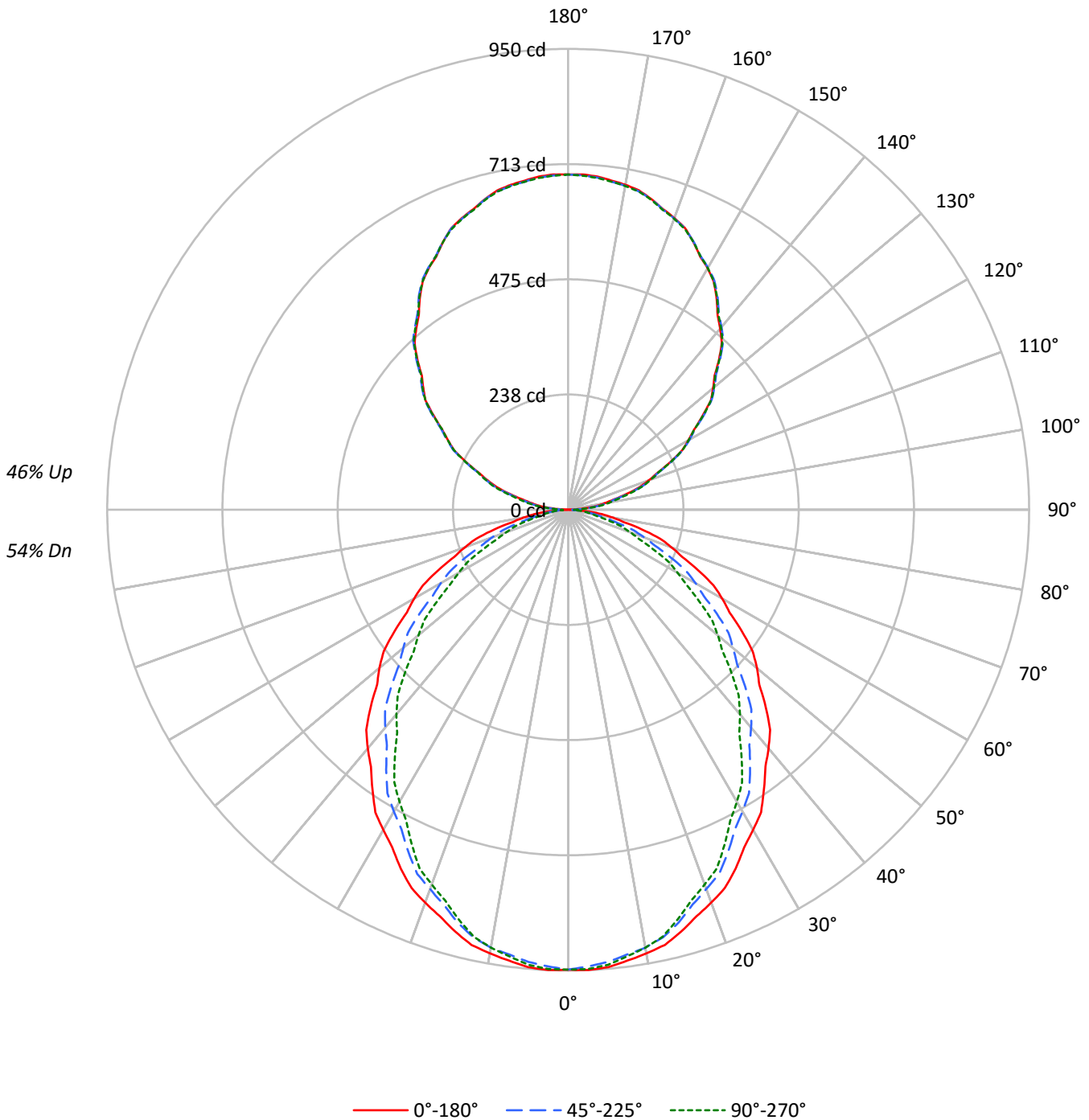
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	53	52	51
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37
4	76	65	57	51	70	60	53	48	52	47	43	45	41	37	37	34	32
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	31	28
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	2.1
10°-20°	249.2	6.0
20°-30°	361.3	8.7
30°-40°	411.8	9.9
40°-50°	401.4	9.6
50°-60°	337.9	8.1
60°-70°	236.8	5.7
70°-80°	121.7	2.9
80°-90°	32.3	0.8
90°-100°	46.3	1.1
100°-110°	136.7	3.3
110°-120°	231.5	5.6
120°-130°	304.6	7.3
130°-140°	341.3	8.2
140°-150°	334.5	8.0
150°-160°	281.0	6.7
160°-170°	186.8	4.5
170°-180°	65.4	1.6
0°-30°	699.6	16.8
0°-40°	1111.4	26.7
0°-60°	1850.7	44.4
0°-90°	2241.5	53.8
90°-120°	414.4	9.9
90°-150°	1394.9	33.5
90°-180°	1928.0	46.2
0°-180°	4169.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	1	5	9	11	13	4
95°	35	36	41	45	46	37
105°	123	125	128	132	133	131
115°	232	234	235	234	234	229
125°	338	341	342	341	340	303
135°	440	443	444	444	442	339
145°	533	535	537	536	535	333
155°	610	610	610	612	610	281
165°	663	662	662	664	661	187
175°	689	687	687	690	687	65
180°	691	691	691	691	691	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.3	12.6	11.9	11.2	10.5	10.2	10.2	10.3	10.3	10.3	10.5
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	13.0	13.7	14.3	15.0	15.6	16.5	17.5	18.6	19.6	20.6	21.4
95°	35.0	35.2	35.4	35.6	35.9	36.7	37.8	39.0	40.2	41.4	42.2
97.5°	58.1	58.2	58.2	58.3	58.4	59.3	61.0	62.6	64.3	65.9	66.7
100°	75.3	75.3	75.3	75.3	75.3	76.1	77.6	79.2	80.7	82.3	83.3
102.5°	93.8	94.3	94.7	95.2	95.7	96.3	97.1	97.9	98.7	99.4	100.7
105°	122.6	123.2	123.8	124.4	125.0	125.6	126.4	127.1	127.8	128.5	129.2
107.5°	154.4	155.0	155.6	156.2	156.8	157.4	158.0	158.4	159.0	159.6	159.9
110°	176.3	176.9	177.6	178.1	178.8	179.3	179.6	179.9	180.3	180.7	181.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	198.7	199.1	199.3	199.6	200.0	200.4	200.9	201.2	201.7	202.2	202.4
115°	231.8	232.2	232.7	233.2	233.7	234.0	234.2	234.5	234.7	235.0	234.9
117.5°	264.9	265.0	265.3	265.5	265.7	266.0	266.2	266.4	266.6	266.8	266.9
120°	285.5	286.2	286.7	287.3	287.9	288.2	288.4	288.5	288.6	288.7	288.7
122.5°	307.9	308.1	308.3	308.5	308.8	309.0	309.3	309.6	309.9	310.3	310.2
125°	338.2	338.9	339.6	340.4	341.1	341.5	341.6	341.8	341.9	342.0	341.8
127.5°	370.5	370.9	371.3	371.6	372.1	372.4	372.5	372.7	372.8	373.0	372.9
130°	389.8	390.4	391.1	391.6	392.2	392.7	392.9	393.1	393.3	393.6	393.5
132.5°	409.2	410.2	411.1	412.1	413.1	413.6	413.5	413.5	413.4	413.4	413.3
135°	439.8	440.5	441.3	442.0	442.7	443.1	443.3	443.4	443.5	443.6	443.6
137.5°	468.6	469.4	470.0	470.7	471.5	471.9	472.2	472.4	472.7	473.0	473.1
140°	487.1	487.8	488.3	488.9	489.6	490.0	490.4	490.8	491.1	491.4	491.7
142.5°	505.7	506.1	506.6	507.2	507.7	508.1	508.6	509.1	509.5	509.9	510.1
145°	532.8	533.3	533.9	534.3	534.8	535.2	535.6	535.9	536.3	536.6	536.6
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	560.8
150°	574.8	574.7	574.6	574.5	574.3	574.5	575.0	575.4	575.9	576.4	576.4
152.5°	588.5	588.7	588.9	589.1	589.2	589.4	589.6	589.7	589.9	590.2	590.5
155°	609.7	609.7	609.7	609.7	609.7	609.8	609.9	610.0	610.2	610.3	610.8
157.5°	628.7	628.4	628.1	627.9	627.6	627.5	627.6	627.8	627.9	628.0	628.5
160°	639.9	639.5	639.1	638.8	638.4	638.3	638.4	638.6	638.7	638.8	639.2
162.5°	649.8	649.5	649.2	648.9	648.7	648.6	648.6	648.7	648.7	648.7	649.2
165°	663.0	662.7	662.5	662.2	662.0	661.9	662.0	662.2	662.3	662.4	662.9
167.5°	674.2	673.7	673.2	672.7	672.2	672.0	672.0	672.0	672.0	672.0	672.7
170°	680.1	679.7	679.2	678.7	678.3	678.1	678.1	678.1	678.1	678.1	678.7
172.5°	684.5	684.0	683.5	683.1	682.6	682.3	682.3	682.3	682.3	682.3	683.1
175°	689.3	688.8	688.3	687.9	687.4	687.2	687.2	687.2	687.2	687.2	687.9
177.5°	691.8	691.4	691.1	690.7	690.2	690.0	689.9	689.8	689.8	689.7	690.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	10.6	10.7	10.8	10.8	10.7	10.7	10.7	10.6
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	22.2	23.0	23.8	24.3	24.6	24.9	25.1	25.4
95°	43.1	43.9	44.8	45.2	45.5	45.8	46.0	46.3
97.5°	67.5	68.3	69.1	69.6	69.7	69.8	69.9	70.1
100°	84.5	85.5	86.5	87.2	87.5	87.8	87.9	88.2
102.5°	101.8	103.0	104.2	104.9	105.3	105.6	105.9	106.2
105°	130.0	130.6	131.4	132.0	132.2	132.6	133.0	133.4
107.5°	160.3	160.7	161.0	161.2	161.2	161.2	161.1	161.1
110°	181.3	181.7	182.1	182.2	182.1	182.0	181.8	181.7



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CATALOG NUMBER: S125RDIP-S610D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	202.6	202.6	202.8	202.8	202.6	202.4	202.2	202.0
115°	234.7	234.6	234.5	234.4	234.2	234.1	234.0	233.9
117.5°	267.0	267.1	267.2	267.0	266.6	266.1	265.6	265.0
120°	288.7	288.7	288.7	288.5	288.0	287.6	287.1	286.6
122.5°	310.1	310.0	309.9	309.6	309.2	308.9	308.5	308.1
125°	341.5	341.3	341.0	340.8	340.7	340.6	340.4	340.4
127.5°	372.7	372.6	372.5	372.3	372.0	371.8	371.6	371.4
130°	393.3	393.2	393.1	392.9	392.7	392.5	392.2	392.0
132.5°	413.1	413.0	412.9	412.6	412.4	412.0	411.7	411.3
135°	443.6	443.6	443.6	443.4	442.9	442.4	442.0	441.5
137.5°	473.3	473.3	473.5	473.3	472.7	472.1	471.6	470.9
140°	491.9	492.2	492.4	492.2	491.6	491.1	490.4	489.8
142.5°	510.2	510.4	510.5	510.3	509.7	509.1	508.5	507.9
145°	536.6	536.6	536.6	536.4	536.1	535.7	535.4	535.0
147.5°	561.1	561.4	561.7	561.4	560.5	559.8	558.9	558.2
150°	576.4	576.4	576.4	576.3	576.1	575.8	575.6	575.3
152.5°	590.8	591.1	591.4	591.3	590.8	590.4	589.9	589.6
155°	611.2	611.7	612.2	612.2	611.5	611.0	610.3	609.7
157.5°	629.0	629.4	629.9	629.8	629.0	628.2	627.5	626.6
160°	639.7	640.2	640.6	640.6	640.1	639.4	638.9	638.3
162.5°	649.8	650.4	651.0	650.9	650.3	649.5	648.8	648.1
165°	663.4	663.8	664.4	664.2	663.5	662.8	662.0	661.4
167.5°	673.4	674.2	674.9	674.9	674.1	673.4	672.6	671.9
170°	679.5	680.1	680.9	680.8	680.0	679.2	678.3	677.5
172.5°	683.8	684.5	685.2	685.2	684.5	683.7	683.0	682.2
175°	688.6	689.3	690.0	689.9	689.2	688.3	687.5	686.6
177.5°	690.8	691.4	691.9	691.9	691.3	690.6	689.8	689.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0

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