

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: P331433-830

Luminaire Tested: **S122DIP-S1005D530U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331433-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S1005D530U830-4F0-1E-UDD-D1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 530 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5585.9 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

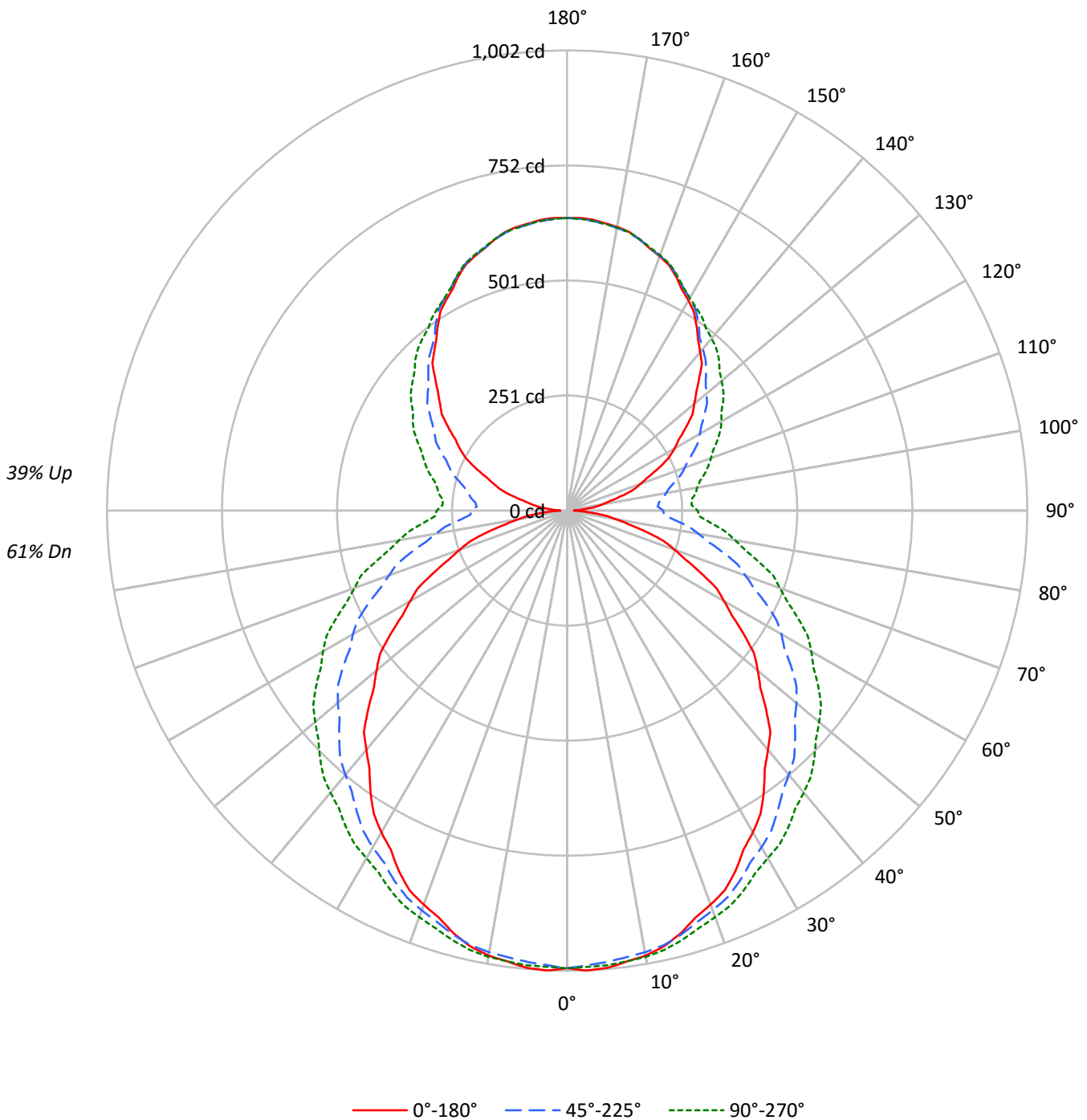
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	98	93	88	84	92	87	83	79	76	72	70	65	63	60	55	54	52
2	89	80	73	67	82	75	69	64	65	60	56	56	52	49	48	45	42
3	81	70	62	55	75	65	58	52	57	51	46	49	44	41	42	38	35
4	73	62	53	46	68	58	50	44	50	44	39	43	38	34	37	33	30
5	67	55	46	39	62	51	43	37	45	38	33	39	34	30	33	29	26
6	62	49	40	34	57	46	38	32	40	34	29	35	30	26	30	26	22
7	57	44	36	30	53	41	34	28	36	30	25	32	26	23	27	23	20
8	53	40	32	26	49	38	30	25	33	27	22	29	24	20	25	21	18
9	49	37	29	23	46	34	27	22	30	24	20	27	22	18	23	19	16
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16091	16091	16091
5°	16172	15491	15432
10°	16069	15033	14865
15°	15848	14548	14266
20°	15567	14030	13691
25°	15292	13528	13167
30°	14902	13015	12643
35°	14508	12517	12274
40°	14092	12094	11903
45°	13700	11715	11587
50°	13277	11373	11276
55°	12834	11004	10959
60°	12292	10623	10624
65°	11728	10173	10227
70°	11096	9693	9797
75°	10286	9222	9401
80°	9006	8739	9001
85°	7780	8321	8687



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	1.7
10°-20°	270.8	4.8
20°-30°	410.4	7.3
30°-40°	499.9	8.9
40°-50°	537.8	9.6
50°-60°	522.2	9.3
60°-70°	456.0	8.2
70°-80°	351.0	6.3
80°-90°	238.1	4.3
90°-100°	202.7	3.6
100°-110°	243.9	4.4
110°-120°	292.5	5.2
120°-130°	325.4	5.8
130°-140°	334.6	6.0
140°-150°	313.3	5.6
150°-160°	260.1	4.7
160°-170°	172.5	3.1
170°-180°	60.3	1.1
0°-30°	775.7	13.9
0°-40°	1275.5	22.8
0°-60°	2335.5	41.8
0°-90°	3380.7	60.5
90°-120°	739.1	13.2
90°-150°	1712.3	30.7
90°-180°	2205.0	39.5
0°-180°	5585.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	1000	995	987	995	994	95
15°	953	956	956	968	968	268
25°	867	877	890	906	911	398
35°	747	772	799	829	841	467
45°	612	652	702	745	761	473
55°	470	523	596	647	667	420
65°	321	392	477	534	555	318
75°	178	259	351	411	432	188
85°	52	142	234	292	315	56
90°	15	106	210	264	284	11
95°	40	114	200	253	272	41
105°	123	168	242	292	310	130
115°	221	242	304	345	361	218
125°	316	323	365	401	415	282
135°	406	413	428	456	467	314
145°	491	495	498	507	513	307
155°	562	563	565	567	566	258
165°	611	611	611	614	612	172
175°	636	634	633	637	634	60
180°	637	637	637	637	637	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6
2.5°	1002.5	1001.7	1000.9	1000.1	999.4	998.1	996.3	994.5	992.7	990.9	992.2
5°	999.6	998.6	997.7	996.6	995.7	994.3	992.4	990.4	988.5	986.6	988.5
7.5°	990.6	990.0	989.3	988.7	988.1	987.0	985.5	984.0	982.6	981.1	983.4
10°	983.7	983.1	982.4	981.8	981.1	980.3	979.4	978.4	977.4	976.5	979.0
12.5°	972.1	972.2	972.4	972.5	972.6	972.3	971.7	970.9	970.3	969.5	972.1
15°	953.4	954.0	954.6	955.3	955.9	956.2	956.2	956.2	956.2	956.2	959.1
17.5°	929.1	930.5	931.8	933.1	934.4	935.7	936.7	937.7	938.8	939.8	942.8
20°	912.9	914.5	916.2	917.8	919.4	920.8	922.1	923.3	924.6	926.0	929.4
22.5°	895.6	897.4	899.3	901.2	903.1	904.8	906.6	908.4	910.2	912.0	915.6
25°	866.7	868.9	871.2	873.5	875.7	878.3	881.1	884.0	886.9	889.8	893.6
27.5°	832.0	835.7	839.3	843.0	846.7	850.2	853.6	857.0	860.4	863.8	868.6
30°	808.9	813.0	817.3	821.4	825.6	829.8	834.0	838.1	842.3	846.5	851.6
32.5°	783.4	788.2	792.9	797.6	802.2	807.0	812.0	816.9	821.9	826.8	832.7
35°	746.8	752.2	757.7	763.2	768.6	774.4	780.5	786.6	792.7	798.8	805.9
37.5°	706.9	713.2	719.5	725.8	732.1	739.1	747.1	755.0	762.9	770.8	778.6
40°	680.3	687.4	694.5	701.5	708.6	716.4	725.1	733.8	742.4	751.1	759.5
42.5°	655.0	661.9	669.0	676.1	683.2	691.6	701.6	711.6	721.5	731.5	740.6
45°	612.5	621.1	629.8	638.5	647.1	657.0	668.4	679.6	690.8	702.0	712.0
47.5°	570.6	580.0	589.5	598.9	608.3	619.6	632.8	645.9	659.1	672.2	682.7
50°	541.7	551.7	561.6	571.6	581.5	593.7	608.1	622.5	637.0	651.5	662.4
52.5°	514.0	524.4	534.9	545.4	555.8	568.6	583.8	599.1	614.3	629.5	640.6
55°	469.5	481.0	492.6	504.2	515.7	529.8	546.5	563.2	579.9	596.5	608.1
57.5°	425.6	438.6	451.6	464.7	477.7	492.7	509.7	526.7	543.8	560.7	573.2
60°	394.4	408.1	422.0	435.7	449.6	465.6	483.9	502.2	520.5	538.8	551.0
62.5°	366.6	380.9	395.2	409.5	423.9	440.2	458.5	476.7	495.1	513.4	526.3
65°	320.7	336.4	352.1	367.9	383.6	401.0	419.9	438.8	457.7	476.6	489.8
67.5°	278.5	294.9	311.3	327.8	344.2	362.1	381.5	401.0	420.3	439.7	453.0
70°	248.5	265.1	281.8	298.5	315.2	333.5	353.5	373.3	393.2	413.1	426.9
72.5°	220.7	237.9	255.1	272.3	289.5	308.2	328.4	348.6	368.7	388.9	402.4
75°	177.7	195.7	213.6	231.6	249.6	268.8	289.4	309.9	330.5	351.0	364.8
77.5°	136.1	154.9	173.7	192.5	211.3	231.1	252.0	272.9	293.7	314.6	328.4
80°	108.3	127.9	147.5	167.1	186.6	206.9	227.7	248.6	269.5	290.3	303.8
82.5°	85.2	104.5	123.9	143.2	162.5	182.8	203.9	225.0	246.1	267.2	280.7
85°	52.0	71.9	91.8	111.7	131.6	151.8	172.4	192.9	213.5	234.0	247.5
87.5°	28.5	47.9	67.3	86.7	106.1	126.3	147.4	168.4	189.5	210.7	223.7
90°	15.0	35.1	55.0	75.1	95.2	116.8	140.0	163.2	186.3	209.5	222.1
92.5°	22.8	41.3	59.7	78.0	96.4	115.7	136.2	156.6	177.0	197.4	210.0
95°	39.5	55.8	72.1	88.3	104.6	122.5	142.0	161.6	181.0	200.5	212.7
97.5°	61.2	75.7	90.1	104.6	119.0	135.7	154.7	173.6	192.6	211.5	223.4
100°	78.3	91.2	104.1	116.9	129.7	145.2	163.6	181.9	200.3	218.6	230.5
102.5°	95.3	106.9	118.5	130.1	141.8	156.5	174.4	192.4	210.3	228.2	239.9
105°	122.8	132.4	142.1	151.7	161.5	174.7	191.7	208.6	225.6	242.5	253.9
107.5°	151.9	159.9	167.9	175.9	183.8	195.9	211.8	227.8	243.7	259.8	270.6
110°	169.8	176.8	184.0	191.1	198.2	209.7	225.5	241.1	256.8	272.6	282.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	190.4	196.4	202.6	208.7	214.8	225.3	240.2	255.0	269.8	284.7	294.7
115°	220.7	225.0	229.2	233.5	237.8	246.9	261.2	275.4	289.6	303.8	313.3
117.5°	249.7	252.9	256.2	259.5	262.7	270.7	283.3	296.1	308.8	321.4	330.6
120°	269.8	272.1	274.4	276.5	278.8	285.9	297.7	309.6	321.5	333.4	342.4
122.5°	288.3	290.0	291.6	293.3	295.0	301.5	312.9	324.3	335.7	347.1	355.5
125°	315.7	316.8	317.8	319.0	320.0	325.5	335.5	345.3	355.2	365.1	373.4
127.5°	343.7	344.8	345.8	346.9	347.9	352.3	360.2	368.1	375.9	383.8	391.3
130°	361.4	362.6	363.8	365.0	366.3	370.1	376.6	383.1	389.6	396.2	403.7
132.5°	381.2	382.1	383.0	384.0	384.9	388.0	393.3	398.5	403.8	409.1	415.9
135°	406.1	407.5	408.8	410.1	411.4	413.8	417.3	420.7	424.1	427.6	434.2
137.5°	434.0	435.0	436.0	437.1	438.1	439.4	441.1	442.9	444.6	446.3	452.1
140°	450.8	451.6	452.3	453.1	453.8	454.8	456.0	457.2	458.5	459.8	464.9
142.5°	468.0	468.7	469.5	470.2	471.0	471.6	472.2	472.7	473.3	473.8	478.0
145°	491.3	492.1	492.9	493.8	494.6	495.4	496.1	496.8	497.6	498.2	500.3
147.5°	513.3	514.3	515.3	516.3	517.3	518.0	518.5	519.0	519.4	520.0	520.5
150°	528.4	529.0	529.8	530.5	531.2	531.8	532.3	532.7	533.2	533.8	534.0
152.5°	541.7	542.4	543.1	543.8	544.5	545.2	545.7	546.3	546.9	547.5	547.9
155°	561.7	562.0	562.4	562.7	563.1	563.5	563.8	564.2	564.5	564.9	565.5
157.5°	578.7	579.0	579.2	579.5	579.8	579.9	580.1	580.4	580.6	580.8	581.6
160°	589.1	589.3	589.6	589.7	590.0	590.2	590.3	590.4	590.6	590.7	591.4
162.5°	598.5	598.6	598.6	598.7	598.7	598.8	598.9	599.1	599.2	599.3	600.1
165°	611.1	611.0	610.9	610.8	610.7	610.6	610.6	610.6	610.6	610.6	611.4
167.5°	621.6	621.3	620.9	620.6	620.2	620.0	620.0	620.0	619.9	619.9	620.8
170°	627.3	626.9	626.5	626.1	625.8	625.6	625.5	625.3	625.2	625.1	625.9
172.5°	631.1	630.7	630.4	630.0	629.7	629.4	629.3	629.2	629.1	629.0	629.8
175°	635.8	635.5	635.1	634.8	634.4	634.1	633.9	633.7	633.4	633.1	634.0
177.5°	637.8	637.4	637.2	636.9	636.6	636.4	636.2	636.0	635.8	635.7	636.2
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6
2.5°	993.4	994.8	996.1	996.5	995.9	995.4	994.9	994.4
5°	990.4	992.4	994.3	995.0	994.8	994.5	994.1	993.8
7.5°	985.7	988.1	990.3	991.4	991.0	990.7	990.3	990.0
10°	981.6	984.2	986.7	987.9	987.5	987.2	986.9	986.6
12.5°	974.7	977.2	979.8	980.9	980.6	980.2	980.0	979.7
15°	962.1	964.9	967.8	969.1	968.7	968.5	968.1	967.8
17.5°	945.8	948.9	951.9	953.4	953.4	953.4	953.4	953.4
20°	932.9	936.5	940.0	941.8	941.8	941.8	941.8	941.8
22.5°	919.1	922.7	926.1	928.2	928.7	929.3	929.7	930.3
25°	897.5	901.4	905.2	907.6	908.6	909.6	910.5	911.4
27.5°	873.5	878.4	883.4	886.1	886.8	887.5	888.3	888.9
30°	856.8	861.9	867.0	870.1	871.0	871.9	873.0	873.9
32.5°	838.7	844.5	850.5	854.2	856.0	857.7	859.5	861.2
35°	812.9	820.0	827.1	831.7	834.0	836.2	838.5	840.7
37.5°	786.5	794.3	802.1	807.2	809.5	812.0	814.4	816.7
40°	767.8	776.2	784.5	790.1	793.1	795.9	798.8	801.7
42.5°	749.7	758.8	768.0	773.9	776.8	779.8	782.6	785.5
45°	721.9	731.9	741.8	748.4	751.6	754.8	758.0	761.2
47.5°	693.1	703.4	713.9	720.9	724.3	727.9	731.4	735.0
50°	673.3	684.2	695.1	702.4	705.9	709.4	712.9	716.4
52.5°	651.9	663.0	674.2	681.6	685.4	689.3	693.1	696.8
55°	619.7	631.2	642.8	650.6	654.8	659.0	663.2	667.3
57.5°	585.7	598.1	610.6	618.9	623.1	627.4	631.6	635.8
60°	563.2	575.4	587.6	596.0	600.4	604.9	609.4	613.9
62.5°	539.3	552.2	565.2	573.8	578.1	582.3	586.5	590.8
65°	503.0	516.1	529.3	538.0	542.2	546.3	550.5	554.7
67.5°	466.3	479.6	492.9	501.7	506.1	510.4	514.8	519.2
70°	440.7	454.5	468.3	477.1	481.0	484.8	488.7	492.6
72.5°	415.9	429.5	443.0	452.1	456.8	461.4	466.0	470.6
75°	378.6	392.4	406.2	415.2	419.3	423.6	427.7	431.9
77.5°	342.0	355.8	369.6	378.7	383.1	387.7	392.2	396.6
80°	317.3	330.8	344.3	353.3	357.8	362.2	366.7	371.3
82.5°	294.2	307.6	321.1	330.0	334.2	338.5	342.7	346.9
85°	261.0	274.5	287.9	296.9	301.4	305.9	310.4	314.9
87.5°	236.7	249.8	262.8	271.4	275.5	279.7	283.8	287.9
90°	234.7	247.3	259.9	268.2	272.1	276.1	280.1	284.1
92.5°	222.6	235.3	247.9	256.2	260.0	263.9	267.8	271.6
95°	224.9	237.1	249.3	257.2	260.8	264.5	268.1	271.6
97.5°	235.3	247.1	259.0	266.8	270.6	274.4	278.1	281.9
100°	242.3	254.2	266.2	273.8	277.2	280.6	284.0	287.4
102.5°	251.6	263.3	275.0	282.6	286.0	289.5	292.8	296.2
105°	265.4	276.9	288.3	295.9	299.4	302.9	306.4	310.0
107.5°	281.5	292.4	303.3	310.2	313.2	316.1	319.1	322.2
110°	293.1	303.4	313.7	320.4	323.6	326.8	329.9	333.1



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CATALOG NUMBER: S122DIP-S1005D530U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	304.7	314.7	324.7	331.3	334.6	337.8	341.1	344.4
115°	322.8	332.3	341.9	348.2	351.4	354.6	357.7	360.9
117.5°	339.9	349.0	358.3	364.4	367.2	370.1	373.1	376.0
120°	351.4	360.3	369.4	375.4	378.6	381.8	384.9	388.1
122.5°	364.0	372.4	380.9	386.4	389.3	392.0	394.7	397.5
125°	381.7	390.1	398.4	403.9	406.7	409.4	412.3	415.0
127.5°	398.8	406.3	413.9	418.9	421.3	423.8	426.2	428.7
130°	411.1	418.6	426.0	430.8	432.9	435.0	437.1	439.2
132.5°	422.9	429.8	436.7	441.3	443.5	445.6	447.8	450.1
135°	440.8	447.4	454.1	458.5	460.7	462.9	465.1	467.3
137.5°	457.9	463.7	469.6	473.3	475.0	476.7	478.4	480.1
140°	470.0	475.1	480.3	483.6	485.0	486.4	488.0	489.4
142.5°	482.2	486.4	490.6	493.3	494.5	495.7	496.9	498.0
145°	502.4	504.4	506.4	508.0	509.2	510.3	511.4	512.6
147.5°	521.0	521.5	522.1	522.5	522.7	523.1	523.4	523.7
150°	534.4	534.8	535.2	535.2	534.8	534.4	534.0	533.8
152.5°	548.4	548.8	549.3	549.3	548.8	548.4	547.9	547.5
155°	566.1	566.7	567.3	567.4	567.0	566.7	566.3	566.0
157.5°	582.4	583.2	584.1	584.2	583.6	583.1	582.5	581.8
160°	592.1	592.9	593.5	593.7	593.2	592.8	592.2	591.7
162.5°	600.9	601.7	602.6	602.7	602.1	601.5	601.0	600.4
165°	612.3	613.1	613.9	614.1	613.4	612.8	612.3	611.6
167.5°	621.6	622.5	623.3	623.4	622.7	622.2	621.5	620.9
170°	626.8	627.6	628.4	628.5	627.7	627.1	626.3	625.7
172.5°	630.7	631.5	632.3	632.4	631.7	630.9	630.2	629.5
175°	634.8	635.7	636.5	636.6	635.8	635.1	634.4	633.7
177.5°	636.8	637.3	637.9	637.9	637.3	636.8	636.2	635.7
180°	636.9	636.9	636.9	636.9	636.9	636.9	636.9	636.9

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