

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: P331306-930

Luminaire Tested: **S122DIP-S485D725U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331306-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S485D725U930-4F0-1E-UDD-D
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 485 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 725 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3966.9 lumens
Efficiency: N/A
Efficacy: 103.3 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-Indirect

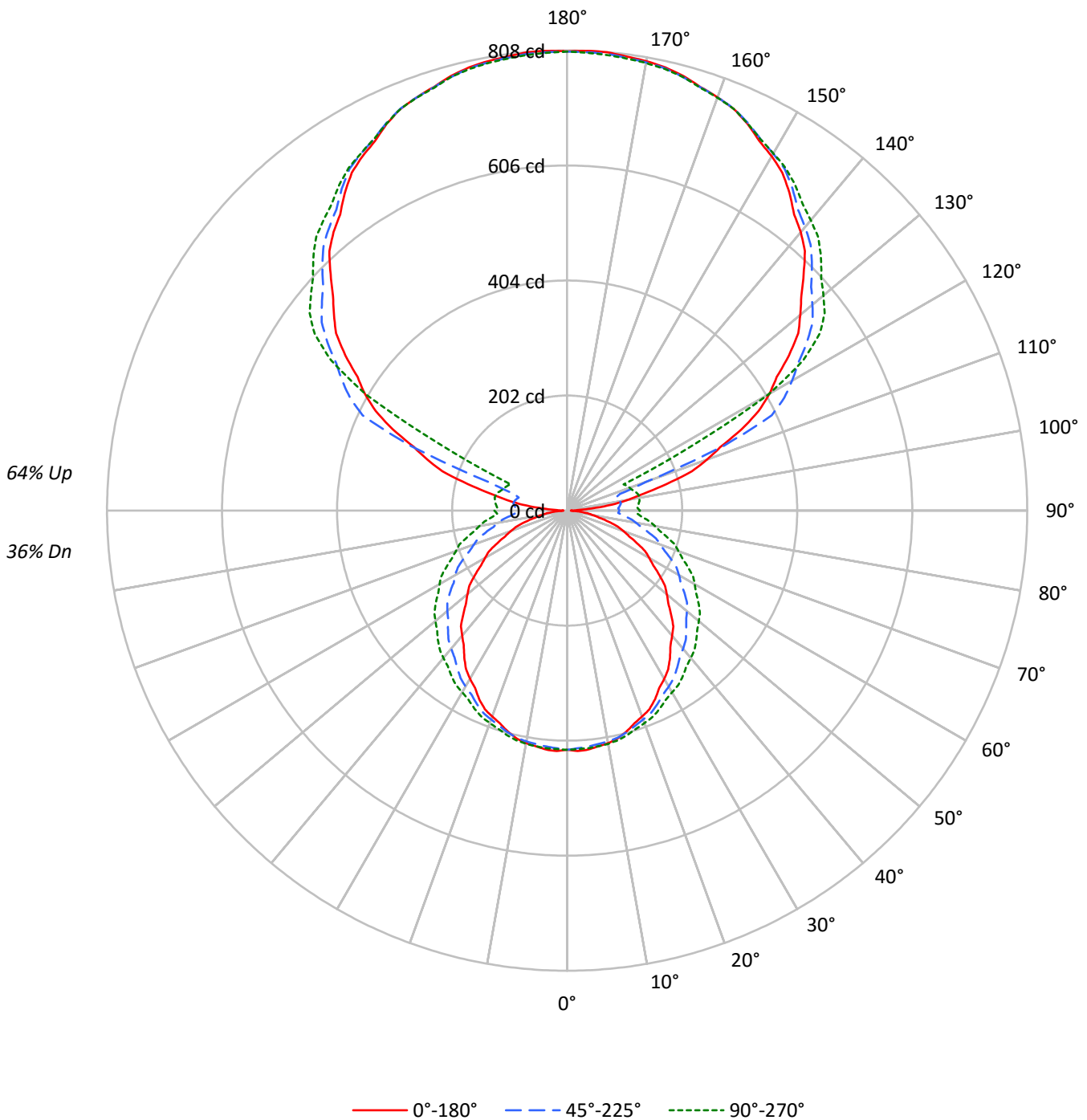
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P331306-930

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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	94	89	85	81	84	80	77	74	64	62	60	50	48	47	36	35	34	28
2	85	77	70	65	76	70	64	59	56	52	48	43	40	38	31	30	28	23
3	77	67	60	54	69	61	54	49	49	44	40	38	34	32	27	25	23	19
4	70	59	51	45	63	54	47	41	43	38	34	33	30	27	24	22	20	16
5	64	52	44	38	58	48	40	35	38	33	29	30	26	23	22	19	17	13
6	59	47	39	33	53	43	35	30	34	29	25	27	23	20	20	17	15	12
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8
10	44	32	24	20	39	29	22	18	24	19	15	19	15	12	14	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6783	6783	6783
5°	6816	6530	6505
10°	6774	6337	6266
15°	6681	6133	6014
20°	6562	5913	5771
25°	6445	5701	5552
30°	6282	5486	5330
35°	6116	5276	5174
40°	5941	5099	5017
45°	5775	4940	4885
50°	5598	4794	4753
55°	5410	4638	4620
60°	5180	4477	4479
65°	4944	4290	4310
70°	4679	4085	4131
75°	4335	3888	3964
80°	3800	3685	3794
85°	3277	3510	3661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	1.0
10°-20°	114.2	2.9
20°-30°	173.0	4.4
30°-40°	210.7	5.3
40°-50°	226.7	5.7
50°-60°	220.1	5.5
60°-70°	192.2	4.8
70°-80°	148.0	3.7
80°-90°	101.3	2.6
90°-100°	95.3	2.4
100°-110°	148.6	3.7
110°-120°	296.5	7.5
120°-130°	453.5	11.4
130°-140°	470.4	11.9
140°-150°	431.4	10.9
150°-160°	345.7	8.7
160°-170°	222.8	5.6
170°-180°	76.7	1.9
0°-30°	327.0	8.2
0°-40°	537.7	13.6
0°-60°	984.5	24.8
0°-90°	1426.0	35.9
90°-120°	540.4	13.6
90°-150°	1895.6	47.8
90°-180°	2541.0	64.1
0°-180°	3966.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	421	419	416	419	419	40
15°	402	403	403	408	408	113
25°	365	370	375	382	384	168
35°	315	325	337	350	354	197
45°	258	275	296	314	321	199
55°	198	220	251	273	281	177
65°	135	165	201	225	234	134
75°	75	109	148	173	182	79
85°	22	60	99	123	133	24
90°	7	48	92	118	128	6
95°	43	54	93	118	126	50
105°	180	206	88	115	125	193
115°	338	356	396	157	109	332
125°	475	484	514	533	541	424
135°	587	597	608	626	630	454
145°	681	681	690	697	698	426
155°	749	745	751	754	750	345
165°	790	786	788	792	788	223
175°	808	804	805	808	803	77
180°	806	806	806	806	806	



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CATALOG NUMBER: S122DIP-S485D725U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1
2.5°	422.6	422.2	421.9	421.6	421.3	420.7	420.0	419.2	418.5	417.7	418.2
5°	421.3	420.9	420.5	420.1	419.7	419.1	418.3	417.5	416.7	415.9	416.7
7.5°	417.6	417.3	417.0	416.8	416.5	416.0	415.4	414.8	414.2	413.5	414.5
10°	414.7	414.4	414.1	413.8	413.6	413.3	412.9	412.5	412.1	411.6	412.7
12.5°	409.8	409.9	409.9	409.9	410.0	409.9	409.6	409.3	409.0	408.7	409.8
15°	401.9	402.1	402.4	402.7	402.9	403.1	403.1	403.1	403.1	403.1	404.3
17.5°	391.7	392.2	392.8	393.4	394.0	394.4	394.8	395.3	395.7	396.2	397.4
20°	384.8	385.5	386.2	386.9	387.5	388.2	388.7	389.2	389.8	390.3	391.8
22.5°	377.5	378.3	379.1	379.8	380.7	381.4	382.2	382.9	383.7	384.5	386.0
25°	365.3	366.3	367.2	368.2	369.1	370.2	371.5	372.7	373.9	375.0	376.7
27.5°	350.7	352.3	353.8	355.4	356.9	358.4	359.8	361.3	362.6	364.1	366.2
30°	341.0	342.8	344.5	346.3	348.1	349.8	351.6	353.3	355.1	356.8	359.0
32.5°	330.3	332.2	334.2	336.2	338.2	340.2	342.3	344.4	346.4	348.5	351.0
35°	314.8	317.1	319.4	321.7	324.0	326.4	329.0	331.6	334.1	336.7	339.7
37.5°	298.0	300.7	303.3	306.0	308.6	311.6	315.0	318.2	321.6	324.9	328.2
40°	286.8	289.8	292.8	295.7	298.7	302.0	305.7	309.3	313.0	316.7	320.2
42.5°	276.1	279.1	282.0	285.0	288.0	291.6	295.8	299.9	304.2	308.3	312.2
45°	258.2	261.8	265.5	269.1	272.8	277.0	281.7	286.4	291.2	296.0	300.1
47.5°	240.5	244.5	248.5	252.4	256.4	261.2	266.8	272.3	277.9	283.4	287.8
50°	228.4	232.5	236.8	240.9	245.1	250.2	256.3	262.4	268.6	274.6	279.2
52.5°	216.6	221.0	225.4	229.9	234.3	239.7	246.1	252.5	258.9	265.4	270.0
55°	197.9	202.8	207.7	212.5	217.4	223.3	230.4	237.4	244.4	251.4	256.3
57.5°	179.4	184.9	190.4	195.8	201.4	207.7	214.8	222.0	229.2	236.4	241.7
60°	166.2	172.0	177.9	183.7	189.5	196.2	204.0	211.7	219.4	227.1	232.3
62.5°	154.5	160.5	166.6	172.7	178.7	185.6	193.2	201.0	208.7	216.4	221.8
65°	135.2	141.8	148.5	155.1	161.7	169.0	177.0	185.0	193.0	201.0	206.5
67.5°	117.4	124.3	131.3	138.2	145.1	152.6	160.9	169.0	177.2	185.3	190.9
70°	104.8	111.8	118.8	125.8	132.9	140.6	149.0	157.4	165.8	174.1	179.9
72.5°	93.0	100.3	107.5	114.8	122.1	130.0	138.4	146.9	155.4	163.9	169.7
75°	74.9	82.5	90.0	97.6	105.2	113.3	122.0	130.6	139.3	148.0	153.8
77.5°	57.4	65.3	73.2	81.1	89.1	97.4	106.2	115.0	123.8	132.6	138.4
80°	45.7	53.9	62.2	70.4	78.7	87.2	96.0	104.8	113.6	122.4	128.1
82.5°	36.0	44.1	52.2	60.3	68.5	77.0	85.9	94.8	103.7	112.7	118.3
85°	21.9	30.3	38.7	47.1	55.4	64.0	72.6	81.3	90.0	98.7	104.4
87.5°	12.1	20.4	28.8	37.1	45.4	54.1	62.9	71.8	80.6	89.5	95.1
90°	6.7	16.0	25.2	34.5	43.8	53.2	62.9	72.6	82.3	92.0	98.1
92.5°	17.4	24.5	31.7	38.9	46.1	54.1	62.9	71.8	80.6	89.5	95.1
95°	42.8	44.8	47.0	49.0	51.1	56.7	65.7	74.7	83.7	92.8	98.6
97.5°	79.5	73.1	66.7	60.3	53.9	55.7	65.6	75.4	85.4	95.2	100.8
100°	107.5	94.7	82.0	69.2	56.5	55.0	64.8	74.6	84.4	94.2	100.2
102.5°	137.8	138.6	139.4	140.2	141.0	135.9	124.8	113.8	102.7	91.6	97.9
105°	180.3	188.2	196.0	203.7	211.6	201.3	173.0	144.6	116.3	88.0	94.1
107.5°	229.6	235.9	242.1	248.4	254.7	239.9	204.2	168.6	132.9	97.2	100.3
110°	260.8	266.2	271.7	277.1	282.5	269.8	239.0	208.1	177.3	146.5	137.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	290.7	295.4	300.0	304.7	309.4	310.2	307.3	304.4	301.4	298.5	255.5
115°	337.8	341.4	345.2	348.9	352.5	359.1	368.4	377.7	387.0	396.4	340.4
117.5°	379.3	382.7	386.1	389.6	393.1	398.7	406.5	414.4	422.2	430.1	419.6
120°	410.1	412.5	415.1	417.5	420.0	425.1	432.8	440.6	448.3	456.1	461.5
122.5°	436.2	438.5	440.8	443.0	445.2	450.2	457.9	465.5	473.1	480.7	485.3
125°	475.4	477.0	478.7	480.5	482.1	486.3	493.2	499.9	506.7	513.5	518.0
127.5°	511.4	513.1	514.9	516.6	518.4	521.9	527.2	532.6	537.9	543.2	547.9
130°	534.3	536.2	538.2	540.1	542.0	545.1	549.4	553.7	557.9	562.2	566.9
132.5°	557.6	559.2	560.8	562.5	564.1	566.7	570.4	574.0	577.6	581.2	585.5
135°	587.3	589.4	591.5	593.5	595.6	597.9	600.5	602.9	605.4	608.0	612.1
137.5°	618.0	619.4	620.9	622.2	623.7	625.3	627.3	629.2	631.1	633.0	636.8
140°	638.1	639.0	639.8	640.7	641.6	642.9	644.7	646.4	648.1	649.7	653.1
142.5°	654.8	655.7	656.5	657.2	658.0	659.3	661.0	662.7	664.4	666.0	668.9
145°	680.6	680.4	680.4	680.2	680.1	681.1	683.3	685.5	687.7	689.9	691.6
147.5°	703.6	703.1	702.6	702.1	701.6	702.5	704.7	706.8	709.0	711.2	711.9
150°	718.5	717.6	716.7	715.8	714.9	715.5	717.5	719.6	721.7	723.7	724.6
152.5°	731.1	730.1	729.1	728.1	727.1	727.6	729.5	731.5	733.4	735.4	736.2
155°	749.4	748.3	747.1	745.9	744.8	744.9	746.5	748.0	749.6	751.1	752.0
157.5°	763.8	762.8	761.8	760.8	759.9	759.9	761.0	762.1	763.1	764.3	765.2
160°	772.2	771.4	770.6	769.8	769.1	769.1	769.8	770.6	771.4	772.2	773.0
162.5°	779.7	778.9	778.1	777.3	776.5	776.5	777.1	777.8	778.5	779.2	780.1
165°	789.7	788.9	788.1	787.3	786.5	786.4	786.8	787.2	787.5	787.9	788.8
167.5°	797.1	796.4	795.6	794.8	794.0	793.8	794.2	794.5	794.9	795.2	796.1
170°	801.4	800.5	799.8	799.0	798.3	797.9	798.3	798.5	798.7	799.0	799.9
172.5°	804.1	803.3	802.6	801.8	801.0	800.8	801.0	801.3	801.5	801.8	802.7
175°	807.7	806.8	805.9	805.0	804.1	803.8	804.0	804.3	804.5	804.9	805.8
177.5°	808.4	807.6	806.9	806.2	805.4	805.1	805.2	805.4	805.4	805.5	806.2
180°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0



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CATALOG NUMBER: S122DIP-S485D725U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1
2.5°	418.8	419.3	419.9	420.0	419.8	419.6	419.4	419.1
5°	417.5	418.3	419.1	419.5	419.3	419.2	419.1	418.9
7.5°	415.5	416.5	417.4	417.8	417.8	417.6	417.4	417.4
10°	413.8	414.8	416.0	416.5	416.3	416.1	416.0	415.9
12.5°	410.8	412.0	413.0	413.5	413.4	413.2	413.1	412.9
15°	405.5	406.8	408.0	408.5	408.4	408.2	408.1	408.0
17.5°	398.7	400.0	401.2	401.9	401.9	401.9	401.9	401.9
20°	393.3	394.8	396.2	397.0	397.0	397.0	397.0	397.0
22.5°	387.4	388.9	390.4	391.3	391.5	391.7	391.9	392.2
25°	378.3	379.9	381.6	382.6	383.0	383.4	383.8	384.3
27.5°	368.3	370.3	372.3	373.5	373.8	374.1	374.4	374.7
30°	361.2	363.3	365.5	366.7	367.1	367.5	367.9	368.4
32.5°	353.5	356.0	358.5	360.1	360.9	361.6	362.3	363.1
35°	342.7	345.7	348.6	350.6	351.6	352.5	353.4	354.4
37.5°	331.5	334.8	338.1	340.2	341.3	342.3	343.2	344.3
40°	323.7	327.2	330.7	333.0	334.3	335.5	336.7	337.9
42.5°	316.0	319.8	323.7	326.3	327.4	328.6	329.9	331.1
45°	304.4	308.5	312.7	315.4	316.8	318.2	319.5	320.9
47.5°	292.1	296.5	300.9	303.9	305.3	306.8	308.3	309.8
50°	283.8	288.4	293.0	296.0	297.6	299.1	300.5	302.0
52.5°	274.8	279.5	284.2	287.3	288.9	290.6	292.1	293.8
55°	261.2	266.1	270.9	274.3	276.1	277.8	279.6	281.3
57.5°	246.9	252.1	257.4	260.9	262.7	264.5	266.3	268.1
60°	237.4	242.6	247.7	251.2	253.1	255.0	256.9	258.8
62.5°	227.3	232.8	238.2	241.9	243.7	245.5	247.3	249.1
65°	212.1	217.6	223.1	226.8	228.5	230.3	232.0	233.8
67.5°	196.6	202.1	207.7	211.5	213.3	215.2	217.0	218.8
70°	185.8	191.6	197.4	201.1	202.8	204.4	206.0	207.7
72.5°	175.4	181.1	186.8	190.6	192.5	194.4	196.4	198.4
75°	159.6	165.4	171.2	175.0	176.8	178.6	180.3	182.1
77.5°	144.2	150.0	155.8	159.6	161.5	163.4	165.3	167.2
80°	133.8	139.4	145.1	148.9	150.8	152.7	154.6	156.5
82.5°	124.0	129.7	135.3	139.1	140.9	142.7	144.5	146.3
85°	110.0	115.7	121.4	125.1	127.0	129.0	130.9	132.7
87.5°	100.9	106.5	112.1	115.9	117.6	119.4	121.2	122.9
90°	104.2	110.2	116.3	120.3	122.1	124.0	125.9	127.8
92.5°	100.8	106.5	112.1	115.8	117.6	119.4	121.2	122.9
95°	104.4	110.1	115.9	119.6	121.1	122.5	124.1	125.6
97.5°	106.3	111.8	117.3	121.0	122.7	124.5	126.2	128.0
100°	106.2	112.3	118.3	122.2	123.9	125.7	127.4	129.2
102.5°	104.1	110.4	116.7	120.7	122.5	124.4	126.2	128.1
105°	100.3	106.4	112.6	116.7	118.7	120.7	122.7	124.7
107.5°	103.4	106.5	109.6	112.1	114.1	116.1	118.1	120.2
110°	129.2	120.6	112.0	108.7	110.7	112.7	114.7	116.7



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CATALOG NUMBER: S122DIP-S485D725U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	212.5	169.6	126.7	106.2	108.0	110.0	111.9	113.7
115°	284.5	228.5	172.6	140.7	132.8	125.0	117.2	109.3
117.5°	409.1	398.6	388.1	368.2	338.9	309.6	280.3	251.0
120°	466.8	472.1	477.5	472.1	456.2	440.2	424.1	408.1
122.5°	489.9	494.6	499.2	500.4	498.3	496.2	494.1	492.0
125°	522.6	527.2	531.7	534.8	536.5	538.0	539.6	541.3
127.5°	552.5	557.3	561.9	564.8	566.1	567.4	568.7	570.0
130°	571.5	576.3	580.9	583.7	584.7	585.6	586.5	587.5
132.5°	590.0	594.3	598.6	601.3	602.3	603.2	604.1	605.1
135°	616.3	620.4	624.5	627.0	627.9	628.7	629.5	630.3
137.5°	640.6	644.3	648.1	650.2	650.7	651.2	651.7	652.1
140°	656.4	659.7	663.1	664.8	665.0	665.1	665.3	665.4
142.5°	671.6	674.4	677.2	678.7	678.7	678.7	678.8	678.9
145°	693.4	695.1	696.8	697.7	697.7	697.7	697.8	697.8
147.5°	712.7	713.5	714.3	714.6	714.4	714.1	714.0	713.7
150°	725.3	726.1	726.8	726.9	726.3	725.6	725.0	724.3
152.5°	736.9	737.8	738.6	738.5	737.7	736.8	736.0	735.1
155°	752.8	753.5	754.3	754.2	753.1	752.1	751.1	750.0
157.5°	766.0	766.9	767.8	767.7	766.7	765.6	764.7	763.7
160°	773.7	774.5	775.3	775.2	774.3	773.4	772.5	771.6
162.5°	780.9	781.8	782.7	782.6	781.5	780.3	779.3	778.1
165°	789.7	790.7	791.6	791.6	790.7	789.7	788.8	787.9
167.5°	797.1	798.0	798.9	798.7	797.6	796.5	795.2	794.1
170°	800.8	801.7	802.7	802.5	801.4	800.1	799.0	797.9
172.5°	803.6	804.5	805.4	805.3	804.1	803.0	801.8	800.6
175°	806.7	807.6	808.5	808.3	807.0	805.7	804.4	803.1
177.5°	807.0	807.7	808.5	808.4	807.4	806.5	805.5	804.6
180°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0

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