

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: P333218

Luminaire Tested: **S125DIP-S850D590U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333218
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: S125DIP-S850D590U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5328.2 lumens
Efficiency: N/A
Efficacy: 132.2 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

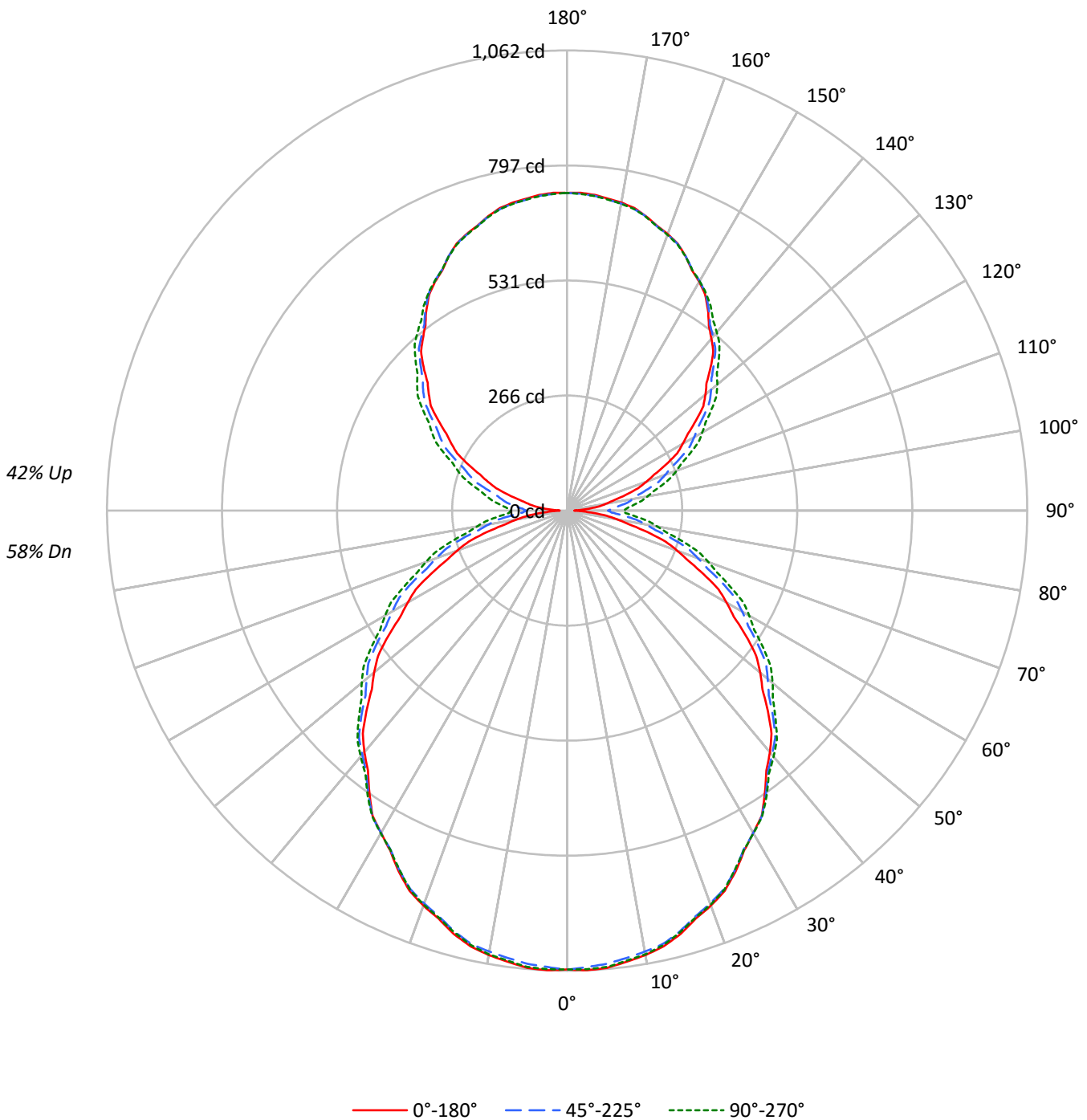
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.9
10°-20°	284.4	5.3
20°-30°	422.9	7.9
30°-40°	500.9	9.4
40°-50°	517.9	9.7
50°-60°	477.1	9.0
60°-70°	385.7	7.2
70°-80°	258.3	4.8
80°-90°	135.5	2.5
90°-100°	124.2	2.3
100°-110°	200.4	3.8
110°-120°	282.7	5.3
120°-130°	344.3	6.5
130°-140°	371.4	7.0
140°-150°	356.8	6.7
150°-160°	298.1	5.6
160°-170°	198.2	3.7
170°-180°	69.4	1.3
0°-30°	807.4	15.2
0°-40°	1308.3	24.6
0°-60°	2303.3	43.2
0°-90°	3082.8	57.9
90°-120°	607.4	11.4
90°-150°	1679.8	31.5
90°-180°	2245.0	42.1
0°-180°	5328.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	17	55	94	120	130	13
95°	51	79	120	146	155	50
105°	139	160	194	217	227	149
115°	252	263	290	307	314	249
125°	363	366	387	402	407	325
135°	469	471	479	492	495	361
145°	566	568	569	574	577	354
155°	647	647	648	650	647	298
165°	703	702	703	705	702	198
175°	731	729	729	732	728	69
180°	733	733	733	733	733	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.5	40.1	47.7	55.3	62.9	70.7	78.7	86.7	94.7	102.8	108.2
90°	17.2	25.6	34.0	42.4	50.8	59.4	68.1	76.8	85.6	94.3	100.2
92.5°	28.8	36.3	43.8	51.4	58.9	67.3	76.4	85.5	94.6	103.7	109.7
95°	50.6	56.8	63.1	69.3	75.6	83.3	92.4	101.5	110.6	119.7	125.7
97.5°	73.9	79.4	84.9	90.4	95.9	103.3	112.6	121.9	131.2	140.6	146.2
100°	91.3	96.1	101.0	105.8	110.7	117.6	126.7	135.7	144.7	153.8	159.7
102.5°	110.1	115.1	120.1	125.0	130.0	136.5	144.6	152.6	160.6	168.7	174.6
105°	139.4	143.7	148.1	152.4	156.7	162.7	170.4	178.1	185.8	193.5	198.8
107.5°	171.9	175.7	179.5	183.3	187.0	192.5	199.8	207.0	214.2	221.5	226.4
110°	194.4	197.8	201.2	204.6	208.0	213.1	220.0	226.8	233.6	240.5	245.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	218.1	220.7	223.2	225.8	228.3	232.9	239.7	246.5	253.2	260.0	264.4
115°	252.1	254.2	256.4	258.5	260.6	264.8	271.0	277.3	283.5	289.8	293.8
117.5°	286.2	287.5	288.8	290.1	291.4	295.0	300.9	306.8	312.7	318.6	322.6
120°	308.1	309.4	310.8	312.1	313.4	316.8	322.2	327.7	333.1	338.5	342.5
122.5°	331.0	331.6	332.1	332.7	333.2	336.2	341.7	347.1	352.6	358.0	361.7
125°	363.0	363.5	364.0	364.6	365.1	367.7	372.5	377.2	382.0	386.7	390.1
127.5°	396.2	396.4	396.6	396.8	397.0	399.0	403.0	406.9	410.9	414.8	418.1
130°	416.7	417.1	417.5	417.9	418.3	420.3	423.7	427.2	430.7	434.2	437.3
132.5°	436.4	437.4	438.4	439.4	440.4	442.1	444.5	447.0	449.4	451.9	455.0
135°	468.7	469.3	469.8	470.3	470.8	472.0	473.7	475.5	477.2	478.9	481.9
137.5°	499.1	499.6	500.2	500.7	501.3	502.1	503.2	504.2	505.3	506.4	509.2
140°	517.9	518.5	519.2	519.8	520.4	521.0	521.7	522.3	522.9	523.5	526.3
142.5°	537.5	537.9	538.2	538.6	538.9	539.3	539.9	540.4	540.9	541.5	543.8
145°	566.4	566.7	566.9	567.2	567.5	567.8	568.2	568.6	569.0	569.3	570.5
147.5°	592.0	592.3	592.6	592.9	593.2	593.4	593.7	594.1	594.4	594.7	595.3
150°	609.8	609.7	609.6	609.5	609.3	609.5	610.0	610.5	611.0	611.5	611.5
152.5°	624.4	624.6	624.8	625.0	625.1	625.3	625.5	625.7	625.9	626.2	626.5
155°	646.9	646.9	646.9	646.9	646.9	647.0	647.1	647.2	647.4	647.5	648.0
157.5°	667.0	666.7	666.4	666.2	665.9	665.8	665.9	666.1	666.2	666.3	666.8
160°	678.9	678.5	678.1	677.7	677.3	677.2	677.3	677.5	677.6	677.7	678.2
162.5°	689.4	689.1	688.8	688.5	688.2	688.1	688.1	688.2	688.2	688.2	688.8
165°	703.4	703.1	702.9	702.6	702.4	702.3	702.4	702.6	702.7	702.8	703.3
167.5°	715.3	714.8	714.2	713.7	713.2	713.0	713.0	713.0	713.0	713.0	713.7
170°	721.6	721.1	720.6	720.1	719.6	719.4	719.4	719.4	719.4	719.4	720.1
172.5°	726.2	725.7	725.2	724.7	724.2	723.9	723.9	723.9	723.9	723.9	724.7
175°	731.3	730.8	730.3	729.8	729.3	729.1	729.1	729.1	729.1	729.1	729.8
177.5°	734.0	733.6	733.2	732.8	732.3	732.1	732.0	731.9	731.8	731.7	732.3
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	113.6	119.1	124.5	128.1	129.8	131.5	133.2	134.8
90°	106.2	112.1	118.1	122.0	124.0	126.0	128.0	130.0
92.5°	115.7	121.6	127.6	131.5	133.4	135.3	137.2	139.1
95°	131.7	137.6	143.6	147.5	149.4	151.3	153.1	155.0
97.5°	151.9	157.6	163.3	167.0	168.7	170.4	172.2	173.9
100°	165.7	171.7	177.7	181.5	183.2	184.8	186.4	188.1
102.5°	180.5	186.4	192.3	196.1	197.9	199.6	201.3	203.1
105°	204.2	209.6	215.0	218.7	220.7	222.6	224.6	226.6
107.5°	231.4	236.3	241.3	244.4	245.8	247.2	248.6	250.1
110°	250.0	254.8	259.6	262.7	264.2	265.7	267.1	268.6



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CATALOG NUMBER: S125DIP-S850D590U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	268.7	273.1	277.5	280.4	281.8	283.2	284.5	285.9
115°	297.9	301.9	305.9	308.6	309.8	311.1	312.3	313.6
117.5°	326.6	330.7	334.7	337.2	338.3	339.4	340.4	341.5
120°	346.4	350.3	354.2	356.6	357.5	358.4	359.3	360.1
122.5°	365.3	368.9	372.6	374.9	375.9	376.9	377.8	378.8
125°	393.6	397.0	400.5	402.7	403.7	404.8	405.8	406.8
127.5°	421.4	424.7	427.9	430.1	431.2	432.3	433.4	434.5
130°	440.4	443.5	446.6	448.6	449.5	450.4	451.3	452.2
132.5°	458.1	461.2	464.3	466.1	466.8	467.4	468.0	468.6
135°	484.9	487.9	490.9	492.8	493.4	494.1	494.7	495.4
137.5°	512.1	515.0	517.9	519.4	519.7	520.0	520.3	520.6
140°	529.1	531.9	534.7	536.2	536.5	536.8	537.1	537.4
142.5°	546.1	548.4	550.7	552.0	552.3	552.6	552.9	553.2
145°	571.6	572.8	573.9	574.8	575.3	575.9	576.4	577.0
147.5°	596.0	596.7	597.4	597.5	597.0	596.6	596.1	595.7
150°	611.5	611.5	611.5	611.5	611.5	611.5	611.5	611.4
152.5°	626.8	627.1	627.4	627.3	626.9	626.5	626.1	625.7
155°	648.5	649.0	649.5	649.5	648.8	648.2	647.5	646.9
157.5°	667.3	667.8	668.3	668.2	667.3	666.5	665.7	664.8
160°	678.7	679.2	679.7	679.7	679.1	678.4	677.8	677.2
162.5°	689.4	690.0	690.7	690.6	689.9	689.1	688.4	687.6
165°	703.8	704.3	704.9	704.7	704.0	703.2	702.4	701.7
167.5°	714.5	715.3	716.0	716.0	715.2	714.4	713.6	712.9
170°	720.9	721.6	722.4	722.3	721.5	720.6	719.7	718.8
172.5°	725.5	726.2	727.0	727.0	726.2	725.4	724.6	723.8
175°	730.6	731.3	732.1	732.0	731.2	730.3	729.4	728.5
177.5°	732.9	733.5	734.1	734.1	733.4	732.7	731.9	731.2
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1

(END OF REPORT)