

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: P333236-930

Luminaire Tested: **S125DIP-S850D1035U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333236-930
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-S850D1035U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5595.9 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

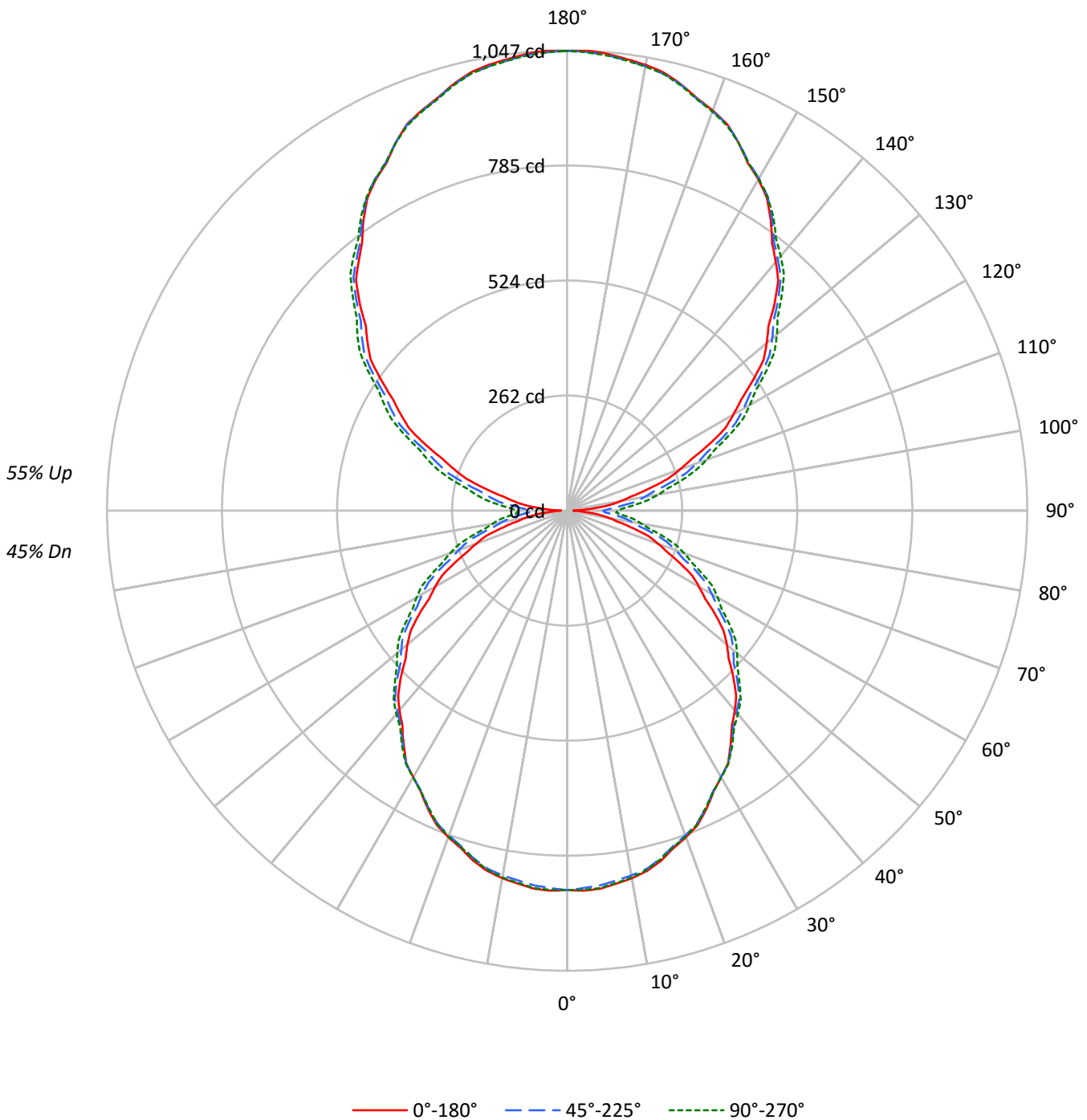
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.5
10°-20°	231.8	4.1
20°-30°	344.8	6.2
30°-40°	408.4	7.3
40°-50°	422.2	7.5
50°-60°	389.0	7.0
60°-70°	314.4	5.6
70°-80°	210.6	3.8
80°-90°	111.5	2.0
90°-100°	131.3	2.3
100°-110°	252.1	4.5
110°-120°	380.7	6.8
120°-130°	478.3	8.5
130°-140°	524.2	9.4
140°-150°	507.9	9.1
150°-160°	425.4	7.6
160°-170°	282.7	5.1
170°-180°	98.9	1.8
0°-30°	658.3	11.8
0°-40°	1066.7	19.1
0°-60°	1877.9	33.6
0°-90°	2514.4	44.9
90°-120°	764.0	13.7
90°-150°	2274.5	40.6
90°-180°	3082.0	55.1
0°-180°	5595.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	48	82	105	114	12
95°	64	88	124	148	156	65
105°	193	212	241	262	271	206
115°	356	366	389	403	407	352
125°	515	520	537	549	552	461
135°	668	672	678	689	690	514
145°	808	810	812	816	818	504
155°	923	923	924	927	923	425
165°	1004	1002	1003	1006	1001	283
175°	1044	1040	1040	1045	1039	99
180°	1046	1046	1046	1046	1046	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.6	32.9	39.2	45.5	51.9	58.3	65.0	71.6	78.3	84.9	89.4
90°	14.3	21.9	29.3	36.8	44.3	51.8	59.4	67.1	74.8	82.4	87.7
92.5°	31.9	38.5	45.1	51.6	58.2	65.6	73.7	81.8	89.8	98.0	103.4
95°	63.9	69.1	74.4	79.7	85.0	91.6	99.9	108.1	116.3	124.5	129.9
97.5°	97.9	102.5	107.0	111.5	116.1	122.7	131.3	140.1	148.7	157.4	162.5
100°	123.3	127.2	131.2	135.1	139.1	145.2	153.6	162.0	170.3	178.7	184.3
102.5°	150.6	155.0	159.3	163.7	168.1	173.8	180.8	187.9	195.0	202.0	207.7
105°	193.2	197.1	201.1	205.0	208.9	214.2	220.9	227.6	234.4	241.1	246.0
107.5°	240.4	243.9	247.3	250.8	254.2	259.1	265.3	271.6	277.9	284.1	288.4
110°	272.9	276.1	279.2	282.4	285.5	290.0	295.9	301.7	307.4	313.3	317.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	306.8	309.1	311.3	313.6	315.8	319.9	325.7	331.5	337.3	343.2	346.8
115°	355.9	357.9	360.0	362.0	364.0	367.7	373.0	378.2	383.4	388.7	391.9
117.5°	405.2	406.3	407.6	408.8	409.9	413.0	418.0	422.9	427.9	432.8	436.2
120°	436.4	437.9	439.4	440.8	442.3	445.3	449.8	454.4	458.9	463.3	466.5
122.5°	469.6	470.2	470.8	471.4	472.0	474.6	479.2	483.9	488.5	493.2	496.1
125°	515.4	516.2	517.1	518.0	518.9	521.4	525.3	529.3	533.2	537.1	539.8
127.5°	563.4	563.8	564.2	564.7	565.1	567.0	570.2	573.6	576.8	580.2	582.8
130°	592.6	593.4	594.1	594.8	595.5	597.4	600.4	603.4	606.3	609.4	611.8
132.5°	621.3	622.7	624.2	625.6	627.0	628.8	630.7	632.7	634.6	636.6	639.0
135°	667.5	668.4	669.3	670.2	671.1	672.3	673.8	675.3	676.8	678.2	680.7
137.5°	710.9	711.8	712.7	713.6	714.5	715.5	716.6	717.6	718.6	719.7	722.1
140°	738.3	739.2	740.1	741.0	741.9	742.7	743.5	744.2	744.9	745.7	748.1
142.5°	766.3	766.9	767.5	768.1	768.7	769.4	770.1	770.9	771.6	772.3	774.3
145°	807.5	808.0	808.5	809.1	809.6	810.2	810.7	811.2	811.8	812.4	813.3
147.5°	844.7	845.1	845.5	846.0	846.3	846.8	847.2	847.6	848.0	848.5	849.2
150°	870.1	869.9	869.8	869.6	869.4	869.7	870.4	871.1	871.8	872.5	872.5
152.5°	891.0	891.2	891.4	891.7	891.9	892.3	892.5	892.8	893.1	893.4	893.8
155°	923.0	923.0	923.0	923.0	923.0	923.1	923.3	923.5	923.7	923.8	924.5
157.5°	951.7	951.3	950.9	950.5	950.1	950.0	950.1	950.3	950.6	950.7	951.5
160°	968.6	968.1	967.5	966.9	966.5	966.3	966.5	966.6	966.8	966.9	967.7
162.5°	983.6	983.2	982.8	982.4	982.0	981.8	981.9	981.9	981.9	981.9	982.8
165°	1003.6	1003.2	1002.9	1002.5	1002.2	1002.1	1002.2	1002.4	1002.6	1002.8	1003.6
167.5°	1020.5	1019.8	1019.1	1018.4	1017.7	1017.2	1017.2	1017.2	1017.2	1017.2	1018.4
170°	1029.6	1028.9	1028.2	1027.5	1026.8	1026.4	1026.4	1026.4	1026.4	1026.4	1027.5
172.5°	1036.2	1035.4	1034.7	1034.0	1033.3	1032.9	1032.9	1032.9	1032.9	1032.9	1034.0
175°	1043.5	1042.8	1042.0	1041.3	1040.6	1040.2	1040.2	1040.2	1040.2	1040.2	1041.3
177.5°	1047.3	1046.7	1046.1	1045.5	1044.9	1044.6	1044.4	1044.2	1044.2	1044.0	1044.9
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	93.9	98.4	103.0	105.9	107.4	108.8	110.1	111.6
90°	92.9	98.2	103.4	107.0	108.8	110.6	112.5	114.4
92.5°	108.8	114.1	119.4	123.0	124.7	126.5	128.2	129.9
95°	135.3	140.7	146.1	149.7	151.3	153.0	154.7	156.4
97.5°	167.6	172.8	178.0	181.2	182.8	184.3	185.7	187.3
100°	189.9	195.4	201.1	204.6	206.1	207.6	209.0	210.5
102.5°	213.2	218.7	224.4	228.0	229.6	231.2	232.8	234.5
105°	250.8	255.7	260.5	263.8	265.7	267.6	269.5	271.3
107.5°	292.6	296.9	301.2	303.9	305.0	306.1	307.3	308.3
110°	321.6	325.6	329.8	332.4	333.5	334.7	335.8	337.0



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CATALOG NUMBER: S125DIP-S850D1035U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	350.5	354.2	357.8	360.2	361.2	362.2	363.1	364.1
115°	395.1	398.4	401.5	403.7	404.6	405.5	406.4	407.4
117.5°	439.5	442.9	446.2	448.2	448.7	449.3	449.8	450.4
120°	469.8	473.0	476.1	477.9	478.3	478.7	479.2	479.6
122.5°	499.0	501.9	504.8	506.5	507.1	507.6	508.2	508.7
125°	542.4	545.1	547.7	549.4	550.2	551.0	551.7	552.5
127.5°	585.4	587.9	590.5	592.2	593.0	593.7	594.4	595.2
130°	614.2	616.7	619.1	620.7	621.3	621.8	622.4	623.0
132.5°	641.5	644.0	646.5	647.8	648.1	648.3	648.7	648.9
135°	683.1	685.6	688.0	689.4	689.6	689.8	690.1	690.2
137.5°	724.6	727.0	729.4	730.6	730.4	730.3	730.1	729.9
140°	750.5	752.9	755.4	756.5	756.4	756.2	756.0	755.9
142.5°	776.2	778.3	780.2	781.1	781.0	780.8	780.7	780.6
145°	814.2	815.1	816.1	816.7	816.8	817.1	817.3	817.5
147.5°	849.9	850.7	851.4	851.3	850.4	849.5	848.6	847.7
150°	872.5	872.5	872.5	872.5	872.3	872.1	872.0	871.8
152.5°	894.3	894.7	895.1	895.0	894.5	893.8	893.2	892.6
155°	925.3	926.0	926.8	926.7	925.8	924.8	923.9	923.0
157.5°	952.1	952.8	953.6	953.3	952.2	951.0	949.7	948.6
160°	968.4	969.1	969.9	969.8	968.9	968.0	967.1	966.1
162.5°	983.7	984.6	985.5	985.4	984.3	983.3	982.2	981.1
165°	1004.2	1004.9	1005.7	1005.5	1004.4	1003.3	1002.2	1001.2
167.5°	1019.5	1020.5	1021.7	1021.6	1020.5	1019.4	1018.2	1017.1
170°	1028.6	1029.6	1030.7	1030.6	1029.4	1028.1	1026.9	1025.6
172.5°	1035.1	1036.2	1037.2	1037.2	1036.1	1035.0	1033.9	1032.7
175°	1042.4	1043.5	1044.6	1044.5	1043.3	1042.0	1040.6	1039.4
177.5°	1045.7	1046.6	1047.4	1047.4	1046.4	1045.4	1044.3	1043.3
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9

(END OF REPORT)