

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: P333208-830

Luminaire Tested: **S125DIP-S850D365U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333208-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4473.7 lumens
Efficiency: N/A
Efficacy: 127.8 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: Semi-Direct

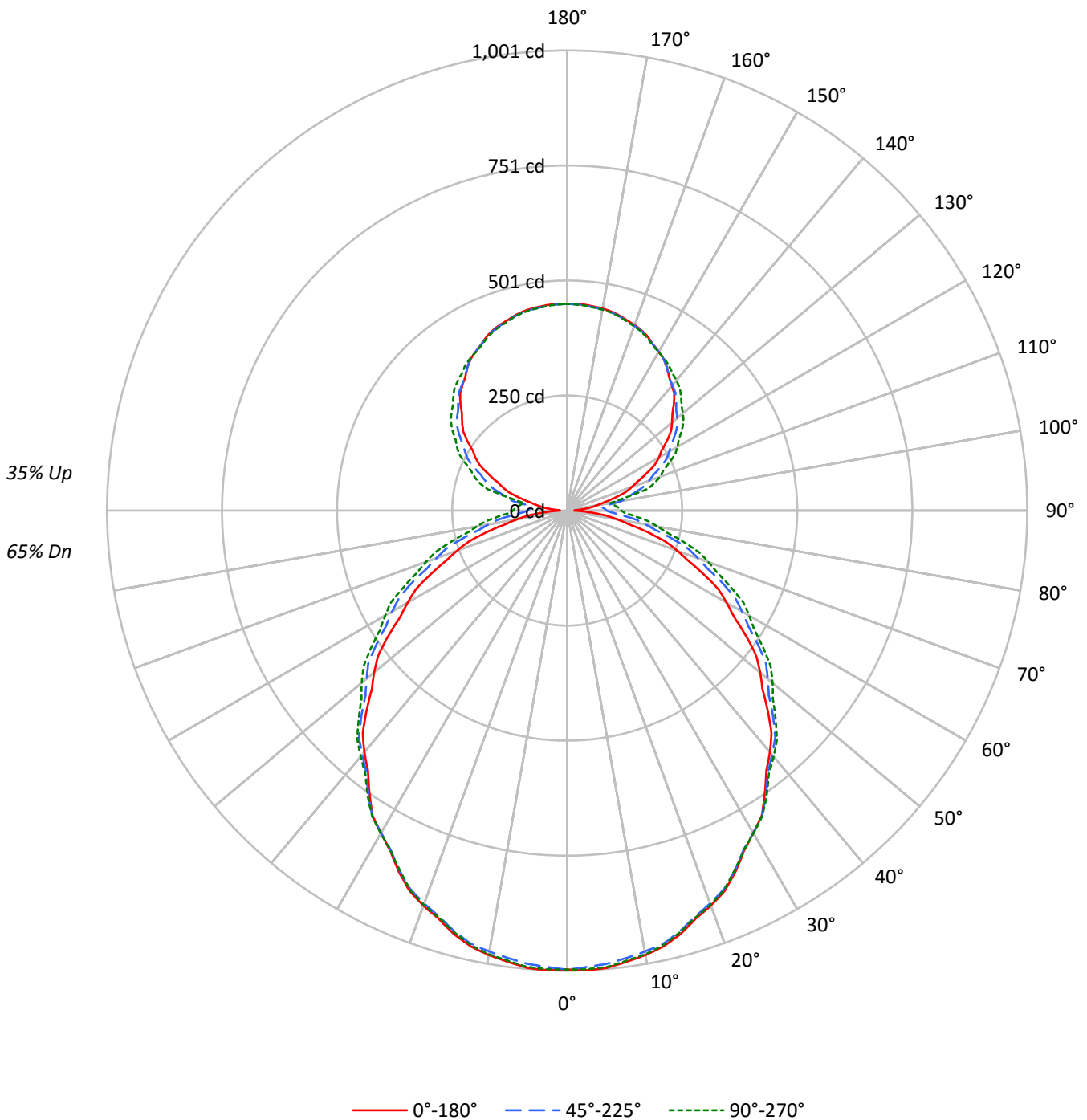
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333208-830

CATALOG NUMBER: S125DIP-S850D365U830-4F0-1E-UDD-D

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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	100	95	91	87	94	90	86	82	79	76	73	69	67	65	60	59	57	53
2	91	83	76	70	85	78	72	67	69	64	60	60	57	54	52	50	47	43
3	83	72	65	58	77	68	61	55	60	55	50	53	49	45	46	43	40	36
4	76	64	56	49	71	60	53	47	53	47	42	47	42	38	41	37	34	31
5	69	57	48	42	65	54	46	40	48	41	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	33	29	26	23
7	59	46	38	32	55	44	36	31	39	33	28	35	29	26	31	26	23	21
8	55	42	34	28	51	40	32	27	36	29	25	32	27	23	28	24	21	18
9	51	38	31	25	48	36	29	24	33	27	22	29	24	20	26	22	19	16
10	48	35	28	23	45	33	27	22	30	24	20	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6448	6448	6448
5°	6461	6330	6350
10°	6415	6216	6207
15°	6340	6081	6026
20°	6237	5914	5845
25°	6114	5735	5621
30°	5965	5538	5419
35°	5827	5357	5233
40°	5686	5166	5046
45°	5526	5003	4880
50°	5375	4826	4733
55°	5192	4659	4561
60°	4992	4468	4385
65°	4783	4270	4187
70°	4546	3997	3985
75°	4170	3735	3735
80°	3682	3416	3463
85°	3220	3204	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	2.1
10°-20°	268.0	6.0
20°-30°	398.6	8.9
30°-40°	472.1	10.6
40°-50°	488.1	10.9
50°-60°	449.7	10.1
60°-70°	363.5	8.1
70°-80°	243.4	5.4
80°-90°	127.2	2.8
90°-100°	87.2	1.9
100°-110°	152.9	3.4
110°-120°	217.6	4.9
120°-130°	254.2	5.7
130°-140°	260.7	5.8
140°-150°	238.3	5.3
150°-160°	191.4	4.3
160°-170°	123.8	2.8
170°-180°	42.7	1.0
0°-30°	761.0	17.0
0°-40°	1233.2	27.6
0°-60°	2171.0	48.5
0°-90°	2905.1	64.9
90°-120°	457.6	10.2
90°-150°	1210.8	27.1
90°-180°	1569.0	35.1
0°-180°	4473.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	996	990	997	997	95
15°	954	954	948	953	950	268
25°	866	869	863	867	862	399
35°	750	756	754	757	757	469
45°	618	628	633	640	641	477
55°	475	490	506	516	521	424
65°	327	349	373	387	392	324
75°	180	206	237	256	261	191
85°	54	86	120	141	150	57
90°	16	50	86	109	118	11
95°	32	56	77	99	107	34
105°	107	124	153	172	179	113
115°	190	199	224	240	244	188
125°	265	268	286	300	305	237
135°	328	329	335	347	350	253
145°	379	379	379	384	386	237
155°	416	415	415	416	414	192
165°	439	438	438	440	437	124
175°	449	448	448	450	447	43
180°	449	449	449	449	449	



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CATALOG NUMBER: S125DIP-S850D365U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1000.8	1000.5	1000.1	999.8	999.4	998.6	997.4	996.2	994.9	993.7	994.9
5°	998.4	998.1	997.6	997.1	996.7	995.7	994.2	992.7	991.2	989.7	991.4
7.5°	989.7	989.5	989.3	989.1	988.9	988.1	986.6	985.0	983.4	981.8	983.4
10°	981.8	981.8	981.8	981.8	981.8	981.0	979.2	977.5	975.7	974.0	975.5
12.5°	970.8	971.0	971.2	971.4	971.6	970.9	969.6	968.2	966.8	965.4	966.6
15°	953.5	953.7	953.9	954.0	954.3	953.7	952.2	950.6	949.0	947.5	948.9
17.5°	930.8	931.1	931.6	932.0	932.5	931.9	930.4	928.9	927.4	925.9	926.8
20°	914.3	914.7	915.1	915.6	916.1	915.5	914.0	912.5	910.9	909.4	910.0
22.5°	895.5	896.3	897.0	897.9	898.6	898.1	896.5	894.8	893.1	891.4	892.2
25°	866.3	867.0	867.6	868.3	868.9	868.6	867.3	866.0	864.7	863.4	864.2
27.5°	833.8	834.8	835.8	836.7	837.6	837.4	835.9	834.4	832.9	831.5	832.1
30°	809.5	810.9	812.2	813.4	814.7	814.7	813.4	812.2	810.9	809.5	810.0
32.5°	787.6	788.7	789.9	791.0	792.1	792.2	791.3	790.3	789.4	788.4	788.8
35°	749.8	751.4	752.9	754.4	755.9	756.4	755.7	755.1	754.4	753.8	754.4
37.5°	712.0	713.4	714.8	716.2	717.7	718.2	717.9	717.7	717.6	717.4	718.2
40°	686.2	688.0	689.7	691.4	693.1	693.9	693.7	693.5	693.2	693.1	693.9
42.5°	658.0	660.3	662.5	664.8	667.0	668.5	668.9	669.4	669.9	670.3	671.4
45°	617.6	620.1	622.5	624.8	627.3	629.0	630.1	631.1	632.3	633.3	634.9
47.5°	576.4	578.6	580.8	583.1	585.2	587.3	589.2	591.1	592.9	594.7	597.0
50°	548.2	550.5	553.0	555.3	557.7	560.2	562.5	565.0	567.3	569.7	572.1
52.5°	518.4	521.3	524.2	527.2	530.1	533.0	535.9	538.9	541.8	544.7	547.2
55°	474.8	478.2	481.7	485.2	488.7	492.2	495.7	499.2	502.6	506.1	508.5
57.5°	430.1	434.3	438.5	442.6	446.9	450.9	455.0	458.9	462.9	466.9	469.7
60°	400.4	404.7	409.1	413.4	417.7	422.2	426.5	430.8	435.2	439.5	442.8
62.5°	371.4	375.7	380.1	384.5	388.8	393.3	398.0	402.7	407.4	412.1	415.8
65°	327.0	332.0	337.0	342.0	346.9	352.0	357.3	362.5	367.8	373.0	376.3
67.5°	285.0	289.9	294.7	299.5	304.3	309.4	314.7	320.1	325.4	330.6	334.6
70°	254.5	259.5	264.5	269.6	274.6	279.8	285.5	291.2	296.8	302.5	306.6
72.5°	224.8	229.9	235.1	240.3	245.4	251.1	257.3	263.5	269.7	275.9	280.3
75°	180.1	185.8	191.4	197.1	202.7	209.1	216.0	223.0	229.9	236.9	241.2
77.5°	137.2	143.7	150.3	156.8	163.3	169.9	176.6	183.3	190.0	196.8	201.5
80°	110.7	117.2	123.7	130.2	136.8	143.6	151.1	158.4	165.9	173.2	178.0
82.5°	86.3	93.2	100.1	107.0	113.9	121.0	128.7	136.2	143.7	151.4	156.0
85°	53.8	61.0	68.2	75.4	82.6	89.9	97.6	105.2	112.8	120.4	125.2
87.5°	30.6	37.7	44.8	51.8	58.9	66.3	73.7	81.2	88.7	96.2	101.3
90°	16.0	23.6	31.1	38.6	46.2	53.9	61.8	69.7	77.7	85.6	91.0
92.5°	19.2	25.3	31.3	37.3	43.4	50.3	58.3	66.4	74.5	82.5	87.7
95°	31.7	37.1	42.6	48.0	53.4	58.4	63.1	67.6	72.2	76.8	81.9
97.5°	51.2	56.6	62.2	67.7	73.1	76.7	78.2	79.8	81.4	82.9	85.4
100°	66.4	71.2	76.0	80.8	85.6	91.6	98.9	106.1	113.4	120.6	114.1
102.5°	81.9	86.4	90.9	95.4	99.9	105.7	112.5	119.5	126.5	133.5	135.8
105°	106.8	110.6	114.3	118.1	121.9	127.1	133.6	140.1	146.6	153.2	157.5
107.5°	132.6	135.6	138.6	141.5	144.5	149.2	155.6	162.0	168.4	174.8	179.2
110°	149.5	152.0	154.7	157.3	159.9	164.3	170.6	176.8	183.0	189.3	193.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.0	168.2	170.5	172.8	175.0	179.2	185.2	191.1	197.2	203.2	206.9
115°	189.8	191.7	193.6	195.5	197.4	201.1	206.9	212.6	218.4	224.0	227.7
117.5°	214.4	215.5	216.4	217.4	218.4	221.7	227.3	233.0	238.7	244.2	247.5
120°	230.5	231.0	231.6	232.1	232.8	235.6	240.9	246.1	251.4	256.6	260.1
122.5°	243.8	244.4	245.0	245.5	246.1	248.9	253.8	258.7	263.7	268.6	272.0
125°	265.4	265.8	266.1	266.4	266.6	269.0	273.3	277.7	282.0	286.3	289.5
127.5°	285.3	285.5	285.7	285.8	286.0	287.8	291.3	294.8	298.3	301.9	304.9
130°	298.1	298.3	298.4	298.6	298.7	300.4	303.5	306.6	309.7	312.8	315.7
132.5°	310.1	310.6	310.9	311.3	311.7	312.9	315.2	317.4	319.5	321.7	324.7
135°	328.1	328.4	328.6	328.9	329.0	329.8	331.2	332.6	333.9	335.4	338.0
137.5°	344.7	344.9	345.1	345.3	345.5	345.9	346.5	347.1	347.7	348.4	350.9
140°	354.8	355.0	355.2	355.2	355.4	355.5	355.7	355.8	356.0	356.1	358.6
142.5°	364.7	364.6	364.5	364.4	364.3	364.4	364.5	364.7	364.8	365.0	367.0
145°	379.1	379.1	379.0	378.9	378.8	378.8	378.8	378.8	378.8	378.8	379.9
147.5°	390.8	390.8	390.8	390.7	390.7	390.7	390.8	390.9	391.0	391.1	391.5
150°	398.8	398.7	398.5	398.3	398.2	398.2	398.3	398.5	398.7	398.8	399.0
152.5°	406.5	406.2	405.9	405.6	405.2	405.1	405.3	405.5	405.6	405.8	405.9
155°	416.5	416.0	415.6	415.1	414.7	414.5	414.7	414.8	415.0	415.1	415.4
157.5°	424.1	423.9	423.6	423.3	423.1	422.9	422.9	423.0	423.0	423.0	423.2
160°	429.4	429.0	428.6	428.1	427.7	427.5	427.5	427.6	427.7	427.8	428.1
162.5°	433.8	433.3	432.8	432.3	432.0	431.8	431.9	431.9	432.0	432.1	432.4
165°	439.4	439.0	438.6	438.1	437.7	437.5	437.5	437.6	437.7	437.8	438.2
167.5°	443.7	443.3	442.8	442.3	441.9	441.7	441.8	441.9	442.0	442.0	442.5
170°	446.1	445.6	445.1	444.6	444.0	443.8	443.9	443.9	444.0	444.1	444.7
172.5°	447.7	447.2	446.7	446.2	445.6	445.4	445.5	445.7	445.8	446.0	446.5
175°	449.4	449.0	448.6	448.1	447.7	447.5	447.5	447.6	447.7	447.8	448.4
177.5°	450.3	449.9	449.5	449.2	448.8	448.7	448.7	448.8	448.8	448.9	449.3
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	996.2	997.4	998.6	999.2	999.0	998.8	998.6	998.4
5°	993.2	994.9	996.6	997.4	997.1	996.9	996.7	996.6
7.5°	984.9	986.4	987.9	988.5	988.4	988.2	987.9	987.7
10°	977.0	978.5	980.1	980.7	980.5	980.3	980.1	979.9
12.5°	967.7	968.9	970.1	970.3	969.8	969.2	968.7	968.1
15°	950.2	951.5	952.8	953.0	952.2	951.2	950.4	949.5
17.5°	927.8	928.9	929.8	930.1	929.5	929.1	928.5	928.0
20°	910.7	911.3	912.0	912.3	912.3	912.3	912.3	912.3
22.5°	893.1	893.8	894.7	894.8	894.3	893.8	893.2	892.8
25°	865.2	866.0	866.9	866.8	865.6	864.6	863.5	862.4
27.5°	832.6	833.3	833.9	834.1	833.6	833.2	832.8	832.5
30°	810.4	810.9	811.2	811.4	811.2	811.0	810.8	810.5
32.5°	789.3	789.7	790.1	790.2	790.0	789.9	789.6	789.4
35°	755.1	755.7	756.4	756.7	756.7	756.7	756.7	756.7
37.5°	719.1	719.9	720.8	721.2	721.1	721.0	721.0	720.9
40°	694.7	695.7	696.5	697.2	697.6	698.0	698.5	698.9
42.5°	672.4	673.4	674.5	675.0	675.1	675.2	675.3	675.4
45°	636.4	637.9	639.4	640.3	640.6	640.7	640.9	641.2
47.5°	599.2	601.4	603.6	605.0	605.5	606.0	606.4	606.9
50°	574.5	576.9	579.3	580.8	581.5	582.1	582.8	583.4
52.5°	549.8	552.3	554.9	556.5	556.9	557.4	557.9	558.4
55°	510.9	513.3	515.7	517.3	518.1	519.1	519.9	520.8
57.5°	472.4	475.1	477.9	479.6	480.2	480.9	481.5	482.2
60°	446.0	449.3	452.6	454.5	455.2	455.8	456.5	457.1
62.5°	419.3	422.9	426.6	428.8	429.6	430.5	431.2	432.1
65°	379.5	382.8	386.0	388.0	389.0	389.8	390.7	391.5
67.5°	338.6	342.5	346.5	349.0	350.2	351.3	352.4	353.5
70°	310.8	314.9	319.1	321.7	323.0	324.3	325.6	327.0
72.5°	284.8	289.3	293.8	296.5	297.5	298.4	299.4	300.3
75°	245.6	250.0	254.3	257.0	258.1	259.2	260.2	261.4
77.5°	206.3	211.1	215.9	218.8	219.6	220.5	221.3	222.3
80°	182.9	187.7	192.4	195.2	196.1	197.0	197.8	198.7
82.5°	160.5	165.1	169.8	172.9	174.5	176.0	177.6	179.2
85°	130.0	134.8	139.6	142.8	144.6	146.3	148.1	149.8
87.5°	106.4	111.4	116.5	119.9	121.4	123.0	124.5	126.1
90°	96.3	101.7	107.1	110.7	112.4	114.1	115.9	117.6
92.5°	92.8	98.0	103.3	106.7	108.3	109.9	111.6	113.2
95°	87.1	92.3	97.5	100.8	102.3	103.8	105.3	106.9
97.5°	87.9	90.4	92.8	94.8	96.3	97.8	99.2	100.8
100°	107.7	101.2	94.7	92.0	93.0	94.1	95.1	96.0
102.5°	138.1	140.4	142.7	141.9	138.3	134.5	130.8	127.1
105°	161.8	166.2	170.5	173.4	174.8	176.3	177.8	179.2
107.5°	183.4	187.8	192.1	194.8	196.0	197.1	198.2	199.3
110°	197.1	201.0	204.9	207.6	209.2	210.8	212.4	214.1



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CATALOG NUMBER: S125DIP-S850D365U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	210.6	214.2	217.9	220.5	221.9	223.3	224.7	226.1
115°	231.3	235.0	238.6	240.8	241.7	242.5	243.4	244.2
117.5°	250.9	254.2	257.5	259.8	261.1	262.4	263.6	264.9
120°	263.6	267.2	270.8	273.1	273.9	274.8	275.8	276.7
122.5°	275.4	278.8	282.1	284.3	285.1	286.0	286.9	287.8
125°	292.8	296.0	299.2	301.1	302.0	302.8	303.8	304.6
127.5°	308.0	311.0	314.1	315.9	316.7	317.4	318.1	318.9
130°	318.5	321.3	324.1	325.9	326.6	327.3	328.1	328.8
132.5°	327.7	330.7	333.8	335.5	336.0	336.6	337.1	337.6
135°	340.7	343.4	346.1	347.7	348.4	349.0	349.7	350.2
137.5°	353.5	356.1	358.7	360.2	360.7	361.3	361.7	362.2
140°	361.2	363.7	366.3	367.8	368.2	368.6	369.0	369.5
142.5°	369.1	371.2	373.2	374.5	374.9	375.3	375.8	376.2
145°	381.2	382.3	383.4	384.3	384.7	385.1	385.5	386.0
147.5°	391.9	392.4	392.9	392.9	392.9	392.7	392.6	392.4
150°	399.1	399.3	399.4	399.3	398.9	398.5	398.1	397.8
152.5°	406.0	406.1	406.3	406.1	405.7	405.2	404.7	404.2
155°	415.6	415.8	416.0	415.8	415.3	414.6	414.1	413.5
157.5°	423.5	423.7	424.0	423.8	423.2	422.5	422.0	421.4
160°	428.4	428.7	429.0	428.9	428.2	427.6	427.1	426.5
162.5°	432.9	433.3	433.8	433.6	432.9	432.3	431.7	431.0
165°	438.7	439.1	439.6	439.5	438.9	438.3	437.7	437.2
167.5°	443.1	443.6	444.1	444.0	443.4	442.7	442.1	441.4
170°	445.3	445.9	446.5	446.5	445.8	445.2	444.4	443.7
172.5°	447.0	447.6	448.1	448.1	447.4	446.7	446.0	445.4
175°	448.9	449.6	450.2	450.2	449.4	448.7	448.1	447.4
177.5°	449.8	450.2	450.5	450.5	450.1	449.6	449.1	448.7
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4

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