

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: P333228-927

Luminaire Tested: **S125DIP-S850D810U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333228-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D810U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4904.9 lumens
Efficiency: N/A
Efficacy: 106.9 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

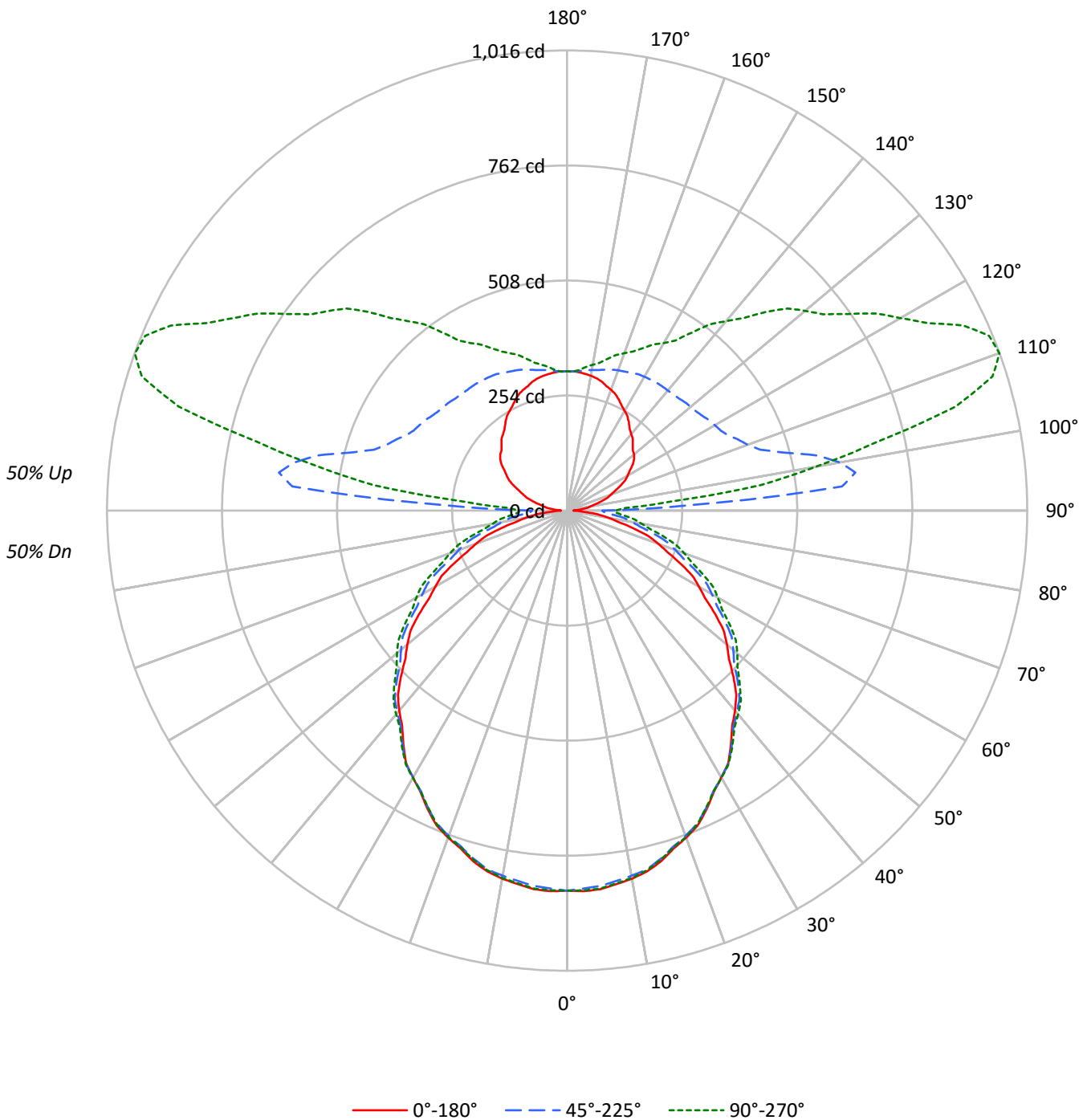
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	40
2	88	80	74	68	81	74	68	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	73	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	20
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	23	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	24	21	18	16
8	53	40	33	27	49	38	30	26	32	27	22	27	23	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	31	25	20	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.6
10°-20°	225.3	4.6
20°-30°	335.0	6.8
30°-40°	396.8	8.1
40°-50°	410.3	8.4
50°-60°	377.9	7.7
60°-70°	305.5	6.2
70°-80°	204.6	4.2
80°-90°	107.8	2.2
90°-100°	282.2	5.8
100°-110°	522.6	10.7
110°-120°	478.7	9.8
120°-130°	380.8	7.8
130°-140°	299.5	6.1
140°-150°	222.0	4.5
150°-160°	155.2	3.2
160°-170°	91.5	1.9
170°-180°	29.8	0.6
0°-30°	639.6	13.0
0°-40°	1036.4	21.1
0°-60°	1824.7	37.2
0°-90°	2442.6	49.8
90°-120°	1283.5	26.2
90°-150°	2185.8	44.6
90°-180°	2462.0	50.2
0°-180°	4904.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	45	77	99	106	10
95°	31	93	609	326	230	30
105°	77	119	494	945	888	82
115°	130	162	393	823	966	128
125°	177	207	365	650	756	157
135°	205	246	350	535	620	159
145°	237	271	344	433	479	149
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.8	37.9	44.0	50.1	56.3	62.7	69.2	75.5	82.0	86.3
90°	13.8	20.3	27.3	34.5	41.5	48.8	55.6	63.1	69.9	77.4	82.2
92.5°	19.4	26.5	37.1	50.1	66.2	90.2	130.4	193.5	261.4	264.5	230.5
95°	31.1	36.5	46.2	57.8	76.1	109.6	182.0	324.5	501.7	608.9	601.1
97.5°	43.6	48.6	56.4	67.5	84.1	109.2	159.1	265.0	449.8	642.0	739.3
100°	52.4	57.5	63.8	74.5	90.1	113.5	155.3	241.6	403.6	612.0	770.6
102.5°	62.2	66.5	72.0	82.9	97.1	119.9	157.6	230.8	368.4	562.3	747.1
105°	77.4	80.3	86.3	95.5	108.3	129.8	162.6	223.2	332.2	494.3	675.7
107.5°	92.3	96.0	101.5	109.0	121.8	141.2	172.9	225.4	315.1	446.9	603.9
110°	103.0	106.5	111.1	118.9	130.4	150.1	180.6	228.5	308.6	424.0	562.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	114.4	117.4	121.1	128.5	139.5	158.5	187.8	233.1	306.1	409.4	530.9
115°	130.1	132.6	135.7	142.6	153.1	171.7	199.3	240.0	304.2	392.6	495.6
117.5°	144.1	146.8	149.6	156.1	167.4	185.1	211.3	248.4	304.6	382.3	472.8
120°	154.0	156.4	159.5	165.6	176.7	194.5	220.4	254.3	306.3	376.7	459.7
122.5°	163.7	165.4	167.6	173.4	185.2	202.9	228.6	260.9	307.2	371.6	448.0
125°	176.7	177.8	180.7	186.1	197.6	215.5	239.6	269.9	309.5	364.6	431.9
127.5°	186.2	187.8	191.6	198.5	210.9	228.4	251.0	278.6	312.9	359.3	416.8
130°	192.7	194.3	199.1	206.9	219.8	237.0	258.8	284.9	315.4	356.3	407.2
132.5°	196.9	199.2	205.2	214.1	227.6	244.7	265.9	289.9	317.7	353.7	398.6
135°	204.8	207.1	214.4	224.1	236.9	254.2	274.6	296.4	320.6	349.7	387.4
137.5°	214.8	216.5	223.3	233.1	245.7	263.2	281.2	301.4	323.8	347.5	378.0
140°	220.1	222.0	229.4	239.3	251.0	267.9	286.1	304.8	324.8	346.0	372.8
142.5°	227.0	228.2	235.0	244.8	256.0	271.6	288.6	306.3	325.1	345.2	368.8
145°	237.4	238.5	244.5	253.0	264.0	278.1	294.2	309.7	326.5	344.4	363.8
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.4
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	90.6	94.9	99.3	102.3	103.5	104.8	106.2	107.5
90°	87.1	91.8	96.6	100.7	102.0	103.2	105.1	106.4
92.5°	182.7	156.7	141.0	134.5	127.9	127.7	128.1	128.3
95°	513.5	423.3	351.2	301.8	259.1	241.8	238.1	229.5
97.5°	726.9	664.7	594.3	524.5	487.5	454.1	437.3	430.6
100°	822.2	795.7	735.7	673.8	632.2	588.7	566.8	558.0
102.5°	852.5	874.9	848.0	806.8	762.2	731.5	707.7	701.4
105°	828.1	916.6	947.5	943.2	924.6	905.5	894.3	888.2
107.5°	754.2	871.0	944.6	979.3	990.5	991.5	988.6	984.8
110°	699.7	820.9	911.6	966.7	995.9	1008.9	1014.5	1015.8



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CATALOG NUMBER: S125DIP-S850D810U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	656.2	771.2	862.8	927.2	969.2	990.8	1002.8	1008.5
115°	601.1	700.4	788.5	858.3	907.7	938.5	957.0	966.1
117.5°	563.8	649.7	725.9	790.0	839.6	871.5	889.9	896.2
120°	543.4	620.8	692.1	748.6	795.6	826.4	844.2	850.2
122.5°	527.0	598.9	662.6	715.6	757.6	785.9	803.7	809.3
125°	503.6	569.7	626.5	673.0	708.6	734.9	749.5	756.5
127.5°	479.5	541.2	594.2	637.9	670.3	693.9	707.8	711.5
130°	464.9	522.0	572.8	614.8	646.7	668.0	681.4	686.0
132.5°	449.9	503.4	549.9	590.3	622.0	643.3	655.5	660.4
135°	429.4	474.5	516.6	553.5	581.7	603.0	615.1	619.7
137.5°	412.4	449.1	484.3	515.6	540.8	560.1	571.1	575.9
140°	402.7	433.8	464.3	491.7	515.4	532.2	542.2	546.1
142.5°	394.3	420.7	446.9	470.7	490.9	505.3	514.8	518.2
145°	384.0	404.1	424.2	441.8	457.4	468.7	476.2	479.4
147.5°	374.9	390.7	405.8	418.7	430.8	439.6	443.9	445.3
150°	369.8	383.4	395.1	406.4	415.9	423.5	426.2	427.0
152.5°	364.8	377.0	387.8	396.4	404.3	410.3	412.8	413.4
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

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