

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: P333228-930

Luminaire Tested: **S125DIP-S850D810U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333228-930
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-S850D810U930-4F0-1E-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: 5048.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

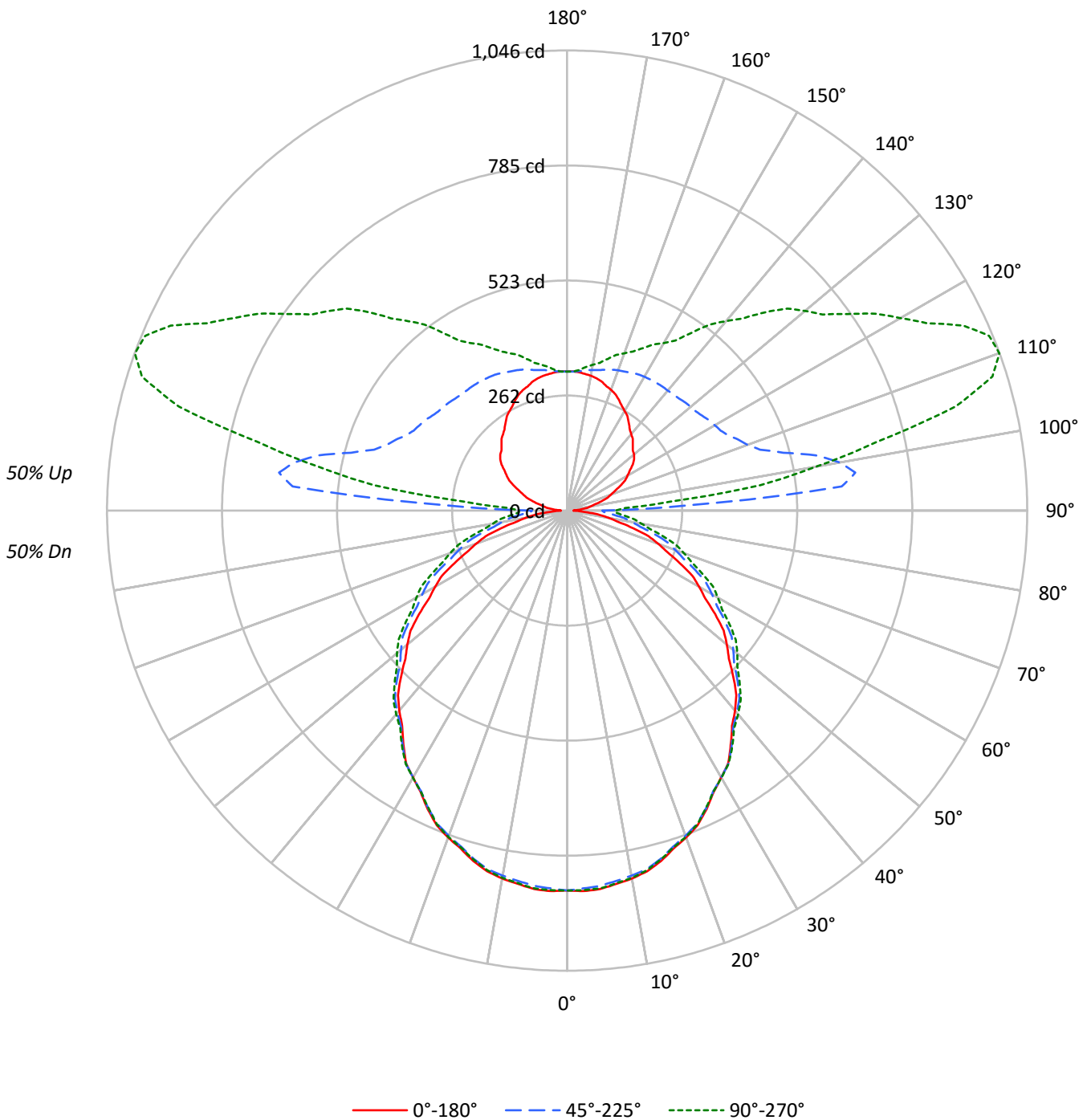
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

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°	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



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.6
10°-20°	231.8	4.6
20°-30°	344.8	6.8
30°-40°	408.4	8.1
40°-50°	422.2	8.4
50°-60°	389.0	7.7
60°-70°	314.4	6.2
70°-80°	210.6	4.2
80°-90°	111.0	2.2
90°-100°	290.5	5.8
100°-110°	537.9	10.7
110°-120°	492.7	9.8
120°-130°	391.9	7.8
130°-140°	308.2	6.1
140°-150°	228.5	4.5
150°-160°	159.7	3.2
160°-170°	94.2	1.9
170°-180°	30.6	0.6
0°-30°	658.3	13.0
0°-40°	1066.7	21.1
0°-60°	1877.9	37.2
0°-90°	2513.9	49.8
90°-120°	1321.0	26.2
90°-150°	2249.6	44.6
90°-180°	2534.0	50.2
0°-180°	5048.0	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	46	80	102	110	10
95°	32	96	627	336	236	31
105°	80	123	509	973	914	84
115°	134	167	404	847	994	132
125°	182	213	375	669	779	161
135°	211	253	360	551	638	164
145°	244	279	354	446	493	153
155°	278	299	346	390	407	128
165°	304	312	332	352	357	85
175°	316	316	318	322	321	30
180°	316	316	316	316	316	



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

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	32.7	39.0	45.2	51.5	58.0	64.5	71.2	77.7	84.4	88.8
90°	14.2	20.9	28.1	35.5	42.7	50.2	57.2	64.9	72.0	79.7	84.6
92.5°	20.0	27.2	38.2	51.6	68.2	92.8	134.2	199.1	269.0	272.2	237.3
95°	32.0	37.6	47.5	59.4	78.4	112.8	187.4	333.9	516.3	626.6	618.6
97.5°	44.9	50.1	58.0	69.5	86.5	112.4	163.8	272.7	462.9	660.7	760.8
100°	54.0	59.2	65.6	76.6	92.7	116.8	159.8	248.7	415.4	629.8	793.1
102.5°	64.0	68.4	74.1	85.3	100.0	123.4	162.2	237.6	379.1	578.7	768.9
105°	79.7	82.7	88.9	98.2	111.5	133.6	167.3	229.8	341.9	508.7	695.5
107.5°	95.0	98.8	104.4	112.2	125.3	145.4	178.0	232.0	324.2	459.9	621.5
110°	106.0	109.6	114.4	122.4	134.2	154.5	185.9	235.1	317.6	436.3	578.9



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	117.7	120.8	124.7	132.2	143.6	163.1	193.3	239.9	315.0	421.3	546.4
115°	133.9	136.5	139.7	146.8	157.6	176.7	205.1	247.0	313.1	404.1	510.1
117.5°	148.3	151.1	154.0	160.6	172.3	190.5	217.4	255.7	313.5	393.5	486.6
120°	158.5	160.9	164.1	170.4	181.8	200.2	226.8	261.7	315.2	387.7	473.1
122.5°	168.5	170.2	172.5	178.5	190.6	208.8	235.3	268.5	316.2	382.5	461.1
125°	181.9	183.0	186.0	191.5	203.4	221.8	246.6	277.8	318.5	375.2	444.5
127.5°	191.6	193.3	197.2	204.3	217.0	235.1	258.4	286.7	322.0	369.7	428.9
130°	198.3	200.0	204.9	213.0	226.2	243.9	266.4	293.3	324.6	366.7	419.1
132.5°	202.7	205.0	211.2	220.4	234.2	251.8	273.6	298.3	327.0	364.0	410.3
135°	210.8	213.1	220.6	230.6	243.9	261.6	282.7	305.0	330.0	360.0	398.7
137.5°	221.1	222.8	229.8	239.9	252.8	270.8	289.4	310.2	333.3	357.7	389.0
140°	226.5	228.4	236.1	246.3	258.4	275.7	294.4	313.6	334.3	356.1	383.7
142.5°	233.7	234.9	241.9	251.9	263.4	279.6	297.0	315.2	334.6	355.3	379.5
145°	244.3	245.5	251.6	260.4	271.7	286.3	302.8	318.7	336.0	354.4	374.5
147.5°	254.7	255.5	261.0	269.3	279.2	292.1	306.6	321.1	336.6	352.8	369.9
150°	261.4	262.6	267.1	275.4	284.3	295.1	309.2	322.5	336.6	351.2	366.6
152.5°	268.5	269.3	273.2	280.5	288.9	298.7	311.7	323.6	336.1	349.2	363.0
155°	277.9	277.9	281.8	288.1	294.5	303.5	314.3	324.5	334.7	345.5	357.0
157.5°	286.3	286.3	289.3	294.7	300.4	307.1	316.4	325.1	333.0	341.7	351.4
160°	292.0	291.3	293.9	298.3	303.5	309.2	317.5	325.1	331.5	339.2	346.8
162.5°	296.5	296.0	298.5	302.4	306.5	311.2	318.5	324.6	330.0	336.1	342.7
165°	303.5	302.1	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	308.0	307.4	308.5	310.3	312.1	314.5	318.7	322.3	324.1	327.0	330.6
170°	311.1	310.5	311.1	312.3	313.6	315.5	318.7	321.3	322.5	324.5	327.0
172.5°	313.2	312.0	312.6	313.9	314.6	315.5	318.2	320.2	320.5	321.4	323.4
175°	315.5	314.3	315.0	315.5	315.5	315.5	317.5	318.7	318.1	318.1	318.7
177.5°	316.7	315.7	315.7	316.2	315.7	315.7	316.7	317.2	316.2	316.2	316.7
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

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°	93.3	97.7	102.2	105.3	106.6	107.9	109.3	110.6
90°	89.6	94.5	99.5	103.6	104.9	106.2	108.2	109.5
92.5°	188.0	161.3	145.1	138.4	131.6	131.4	131.8	132.1
95°	528.5	435.7	361.4	310.6	266.7	248.8	245.1	236.2
97.5°	748.1	684.1	611.6	539.8	501.7	467.3	450.0	443.2
100°	846.2	818.9	757.2	693.4	650.6	605.8	583.3	574.3
102.5°	877.3	900.4	872.7	830.3	784.4	752.8	728.4	721.9
105°	852.2	943.3	975.1	970.7	951.5	931.9	920.4	914.1
107.5°	776.2	896.4	972.2	1007.9	1019.4	1020.4	1017.4	1013.5
110°	720.2	844.8	938.2	994.9	1024.9	1038.4	1044.2	1045.5



TEST NUMBER: P333228-930

CATALOG NUMBER: S125DIP-S850D810U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	675.3	793.7	888.0	954.3	997.5	1019.7	1032.1	1038.0
115°	618.6	720.8	811.5	883.3	934.2	965.9	984.9	994.3
117.5°	580.2	668.6	747.1	813.0	864.1	896.9	915.9	922.3
120°	559.2	638.9	712.2	770.5	818.8	850.5	868.9	875.1
122.5°	542.4	616.4	681.9	736.5	779.7	808.9	827.2	832.9
125°	518.3	586.3	644.7	692.7	729.3	756.4	771.4	778.6
127.5°	493.5	557.0	611.6	656.5	689.9	714.1	728.5	732.3
130°	478.4	537.2	589.5	632.8	665.5	687.5	701.2	706.0
132.5°	463.0	518.1	565.9	607.6	640.2	662.0	674.6	679.6
135°	442.0	488.4	531.7	569.6	598.7	620.6	633.1	637.8
137.5°	424.4	462.2	498.4	530.7	556.6	576.4	587.7	592.7
140°	414.4	446.5	477.8	506.1	530.4	547.7	558.1	562.0
142.5°	405.9	433.0	460.0	484.5	505.2	520.0	529.9	533.3
145°	395.2	415.9	436.6	454.7	470.8	482.3	490.1	493.4
147.5°	385.8	402.1	417.6	431.0	443.4	452.4	456.8	458.3
150°	380.6	394.6	406.7	418.2	428.0	435.9	438.6	439.4
152.5°	375.4	388.0	399.1	408.0	416.0	422.2	424.9	425.5
155°	367.9	378.1	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	360.2	368.6	375.4	381.0	386.0	389.6	391.4	391.3
160°	355.1	361.4	367.9	372.3	376.7	379.9	381.2	380.6
162.5°	349.4	355.3	360.7	364.6	368.1	370.7	371.0	370.9
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	334.3	337.2	340.1	342.4	343.7	344.9	344.4	344.2
170°	330.2	332.2	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	325.6	327.5	329.0	329.7	330.0	331.1	330.1	329.5
175°	320.7	320.7	322.0	322.0	322.0	322.5	321.3	320.7
177.5°	317.2	317.7	317.7	317.7	317.2	317.7	316.2	316.2
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2

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