

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: P333237-830

Luminaire Tested: **S125DIP-S850D1035U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237-830
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-S850D1035U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6595.0 lumens
Efficiency: N/A
Efficacy: 126.8 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: General Diffuse

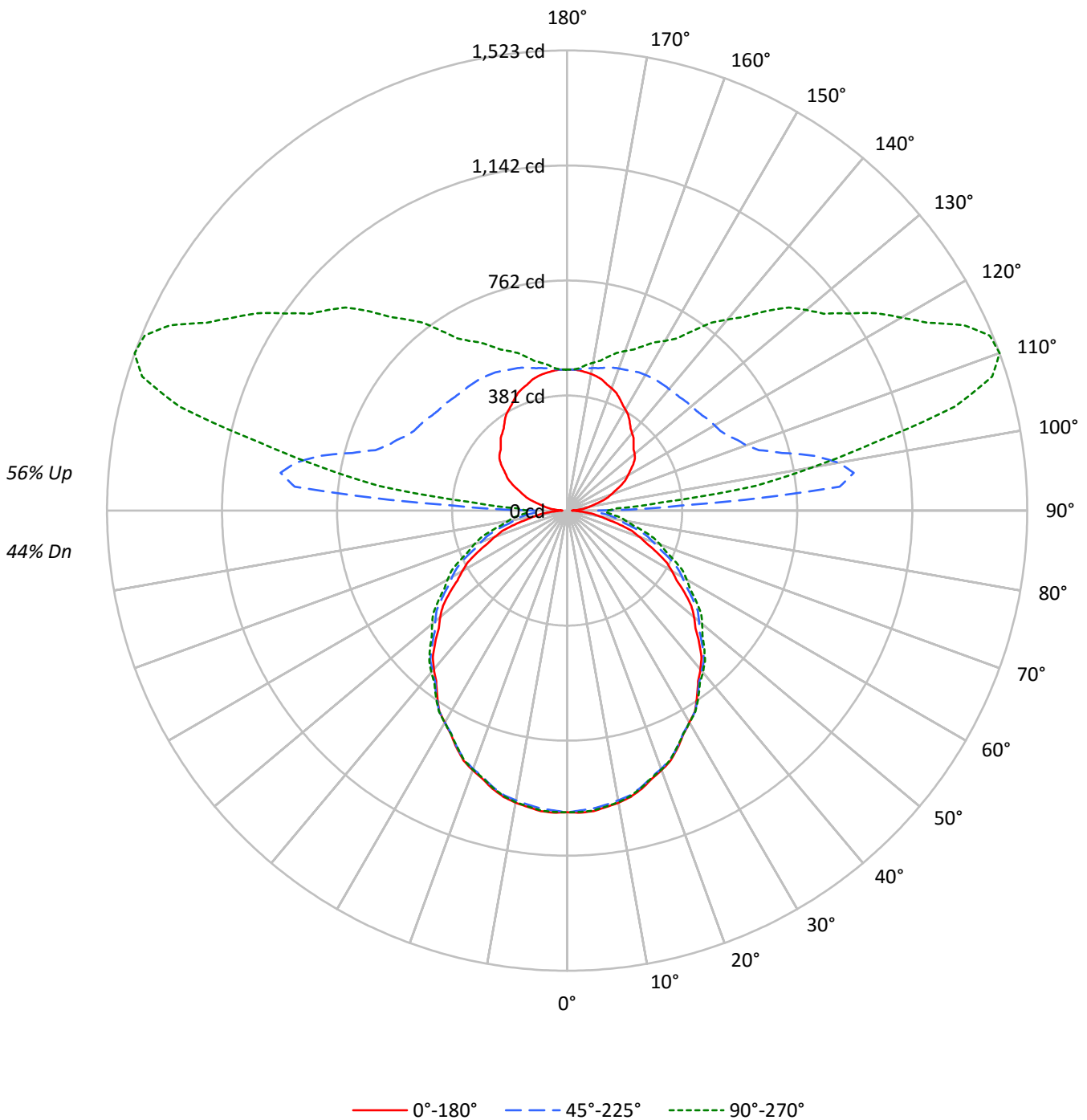
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	1.4
10°-20°	268.0	4.1
20°-30°	398.6	6.0
30°-40°	472.1	7.2
40°-50°	488.1	7.4
50°-60°	449.7	6.8
60°-70°	363.5	5.5
70°-80°	243.4	3.7
80°-90°	128.9	2.0
90°-100°	409.1	6.2
100°-110°	779.4	11.8
110°-120°	717.5	10.9
120°-130°	573.0	8.7
130°-140°	452.5	6.9
140°-150°	336.7	5.1
150°-160°	235.8	3.6
160°-170°	139.0	2.1
170°-180°	45.2	0.7
0°-30°	761.0	11.5
0°-40°	1233.2	18.7
0°-60°	2171.0	32.9
0°-90°	2906.8	44.1
90°-120°	1906.0	28.9
90°-150°	3268.2	49.6
90°-180°	3688.0	55.9
0°-180°	6595.0	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°	17	56	95	122	131	12
95°	44	130	905	470	321	43
105°	115	174	736	1416	1327	121
115°	196	243	586	1236	1450	193
125°	267	313	548	977	1137	237
135°	311	373	529	807	934	241
145°	360	412	523	656	726	226
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D4

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°	30.7	37.9	45.2	52.6	59.9	67.5	75.0	82.8	90.4	98.1	103.4
90°	16.6	24.5	33.4	42.2	51.0	60.1	68.4	77.7	86.1	95.3	101.2
92.5°	25.5	34.5	48.8	66.9	89.5	124.0	182.9	276.7	377.8	380.5	327.5
95°	43.7	50.3	63.5	79.6	105.9	154.8	262.9	477.2	744.3	905.1	892.0
97.5°	63.2	69.4	79.6	95.1	118.9	155.4	229.2	388.0	666.8	956.9	1103.3
100°	76.6	83.0	91.4	106.3	128.8	162.8	224.3	353.5	597.7	912.3	1152.1
102.5°	91.6	97.0	104.2	119.5	140.2	173.1	228.5	338.0	545.0	837.6	1117.2
105°	115.2	118.6	126.8	139.7	158.3	189.5	237.5	327.7	491.4	736.0	1010.4
107.5°	138.1	142.9	150.3	161.1	179.6	207.9	254.3	332.2	466.7	665.2	902.5
110°	154.6	159.1	165.4	176.5	193.2	222.1	266.7	337.7	457.7	631.2	840.5



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.9	175.9	181.0	191.5	207.7	235.4	278.4	345.5	454.7	610.0	793.5
115°	196.0	199.3	203.7	213.7	229.3	256.5	296.9	357.1	453.1	585.8	741.2
117.5°	217.5	221.4	225.4	234.9	251.8	277.8	316.0	371.1	455.0	571.5	707.8
120°	232.6	236.1	240.4	249.6	266.3	292.6	330.5	380.7	458.2	563.8	688.9
122.5°	247.6	250.0	253.4	262.1	279.9	305.9	343.7	391.4	460.4	556.9	672.0
125°	267.4	269.0	273.5	281.8	299.4	325.9	361.4	406.1	465.1	547.5	648.8
127.5°	282.0	284.6	290.4	301.0	319.7	345.8	379.4	420.2	471.4	540.8	627.2
130°	291.8	294.4	301.7	313.8	333.3	359.1	391.3	430.2	475.5	537.0	613.4
132.5°	298.5	302.1	311.0	324.8	345.3	370.8	402.4	438.2	479.8	533.8	601.2
135°	310.6	314.1	325.2	340.1	359.6	385.6	416.3	448.9	485.2	529.1	585.6
137.5°	325.8	328.5	338.8	353.7	372.9	399.4	426.6	457.1	491.0	526.7	572.2
140°	334.0	336.9	348.2	363.3	381.1	406.6	434.1	462.6	492.9	525.1	565.1
142.5°	344.6	346.5	356.8	371.7	388.7	412.6	438.4	465.1	493.8	524.3	559.5
145°	360.4	362.0	371.3	384.2	401.0	422.4	447.0	470.4	495.9	523.1	552.4
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	545.9
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D4

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°	108.6	113.8	118.9	122.5	124.1	125.6	127.3	128.8
90°	107.2	113.2	119.1	124.2	125.7	127.2	129.8	131.3
92.5°	253.5	212.6	187.6	176.8	166.3	165.5	165.7	165.8
95°	757.5	619.3	508.4	432.4	367.2	340.5	334.5	320.9
97.5°	1083.3	987.5	879.4	772.5	715.8	664.6	638.8	628.2
100°	1229.1	1187.6	1095.2	1000.3	936.7	870.2	836.7	823.0
102.5°	1276.1	1308.9	1266.8	1203.4	1135.3	1088.4	1051.9	1041.9
105°	1240.6	1373.9	1419.6	1412.1	1383.6	1354.1	1336.7	1327.0
107.5°	1129.6	1306.0	1416.5	1468.5	1485.1	1486.3	1481.4	1475.3
110°	1047.9	1230.8	1367.6	1450.4	1494.2	1513.6	1521.7	1523.3



TEST NUMBER: P333237-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	982.7	1156.4	1294.5	1391.6	1455.0	1487.1	1505.1	1513.3
115°	900.3	1050.1	1182.9	1288.1	1362.8	1409.3	1436.9	1450.5
117.5°	845.2	974.6	1089.3	1186.0	1260.8	1309.0	1336.6	1345.7
120°	814.9	931.5	1038.8	1124.1	1195.0	1241.4	1268.2	1277.0
122.5°	791.2	899.3	995.0	1075.0	1138.4	1181.1	1207.8	1215.9
125°	756.8	856.3	941.6	1011.6	1065.5	1105.0	1126.9	1137.4
127.5°	721.7	814.5	894.1	959.7	1008.8	1044.1	1065.0	1070.4
130°	700.1	786.0	862.4	925.7	973.8	1006.0	1025.9	1032.6
132.5°	678.2	758.7	828.4	889.3	937.3	969.2	987.5	994.8
135°	648.6	716.3	779.4	835.0	877.5	909.6	927.7	934.3
137.5°	623.9	678.9	731.5	778.8	816.7	845.8	862.3	869.4
140°	609.8	656.5	702.2	743.3	779.0	804.4	819.4	824.9
142.5°	597.9	637.3	676.7	712.4	742.7	764.3	778.5	783.3
145°	582.7	612.9	643.2	669.6	693.1	709.9	721.1	725.8
147.5°	569.2	593.2	616.0	635.6	653.8	667.0	673.4	675.5
150°	561.8	582.4	600.3	617.4	631.7	643.2	647.1	648.4
152.5°	554.2	572.6	589.0	602.2	614.1	623.2	627.0	628.0
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

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