

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: P333235-930

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333235-930
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-S850D1035U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6049.6 lumens
Efficiency: N/A
Efficacy: 116.3 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

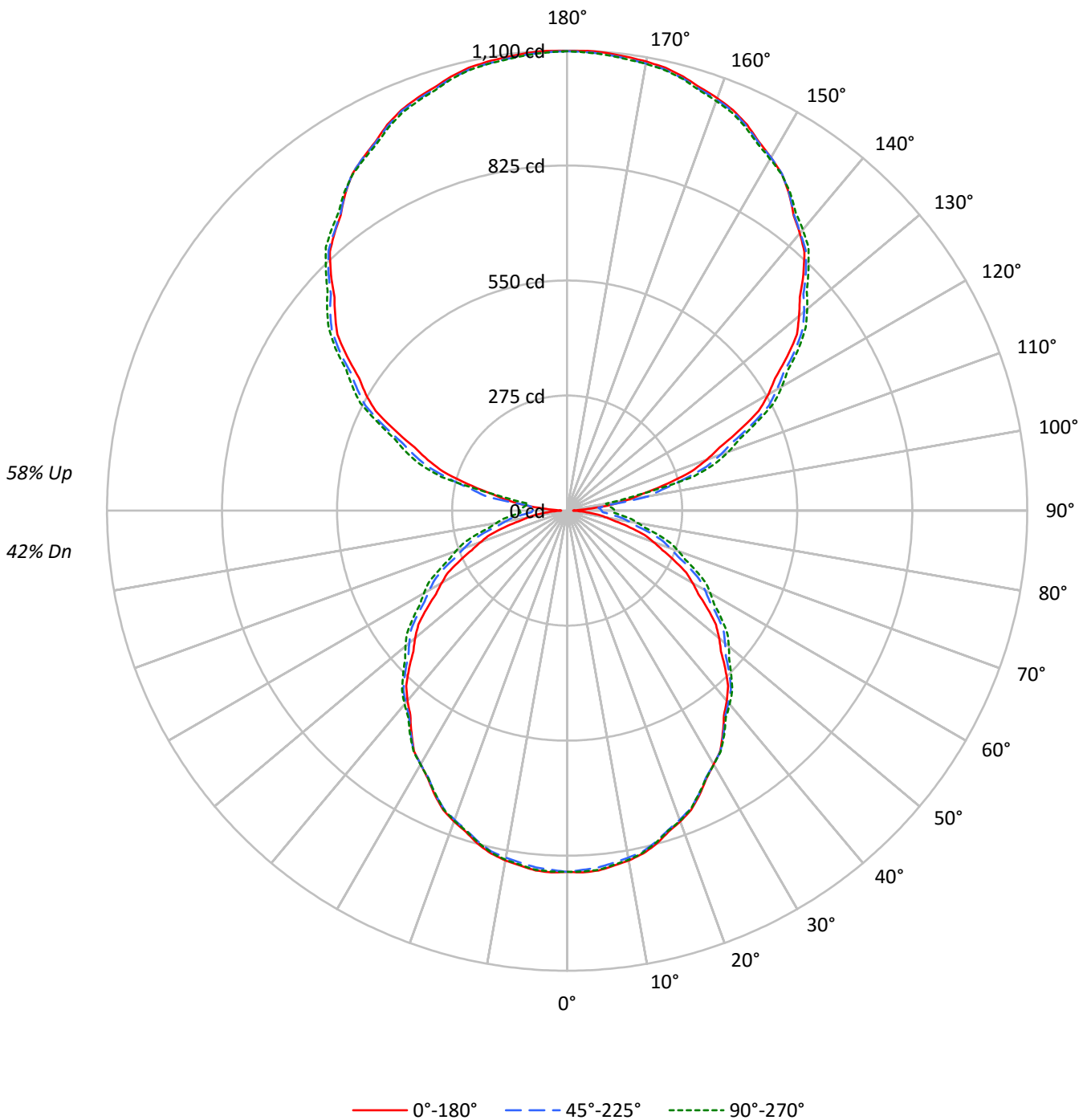
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52	47	45	42	36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	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	1.4
10°-20°	231.8	3.8
20°-30°	344.8	5.7
30°-40°	408.4	6.8
40°-50°	422.2	7.0
50°-60°	389.0	6.4
60°-70°	314.4	5.2
70°-80°	210.6	3.5
80°-90°	111.5	1.8
90°-100°	101.2	1.7
100°-110°	291.1	4.8
110°-120°	476.3	7.9
120°-130°	589.7	9.7
130°-140°	623.3	10.3
140°-150°	579.5	9.6
150°-160°	467.5	7.7
160°-170°	302.4	5.0
170°-180°	104.3	1.7
0°-30°	658.3	10.9
0°-40°	1066.7	17.6
0°-60°	1877.9	31.0
0°-90°	2514.4	41.6
90°-120°	868.7	14.4
90°-150°	2661.0	44.0
90°-180°	3535.0	58.4
0°-180°	6049.6	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	11
95°	57	76	75	97	104	68
105°	247	264	289	305	311	262
115°	454	465	487	499	500	450
125°	642	648	664	674	676	573
135°	799	803	807	816	816	615
145°	925	926	926	930	929	578
155°	1018	1013	1014	1016	1010	469
165°	1074	1069	1070	1074	1068	303
175°	1098	1094	1094	1100	1093	105
180°	1098	1098	1098	1098	1098	



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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°	24.7	29.3	33.8	38.4	43.0	49.1	56.7	64.4	72.1	79.7	84.8
95°	57.4	61.7	66.1	70.4	74.8	76.7	76.2	75.8	75.3	74.8	79.9
97.5°	106.9	112.3	117.6	123.0	128.4	127.3	119.9	112.5	105.1	97.6	96.4
100°	145.3	149.8	154.3	158.7	163.2	168.8	175.6	182.4	189.1	195.8	172.8
102.5°	184.3	188.7	193.0	197.3	201.6	207.0	213.3	219.6	225.9	232.2	230.9
105°	247.0	250.7	254.5	258.1	261.9	266.6	272.2	277.9	283.5	289.2	292.9
107.5°	312.0	314.6	317.2	319.7	322.3	326.4	332.2	338.0	343.8	349.6	353.4
110°	354.3	356.6	358.9	361.1	363.4	367.3	372.9	378.5	384.2	389.9	392.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	394.7	397.0	399.2	401.5	403.7	407.5	412.8	418.2	423.5	428.8	431.5
115°	454.4	456.6	458.9	461.1	463.3	467.0	472.1	477.1	482.2	487.2	489.9
117.5°	516.2	517.1	518.0	518.8	519.6	522.7	528.0	533.3	538.6	543.9	546.2
120°	555.4	555.7	556.1	556.5	556.8	559.5	564.4	569.2	574.1	579.0	581.8
122.5°	589.2	590.1	591.1	592.1	593.0	595.7	600.1	604.5	608.9	613.4	616.1
125°	642.5	643.5	644.6	645.6	646.7	649.1	652.9	656.6	660.5	664.2	666.5
127.5°	692.5	693.2	694.0	694.7	695.4	697.2	700.2	703.2	706.2	709.1	711.5
130°	723.8	724.5	725.2	725.9	726.7	728.4	731.2	734.0	736.9	739.6	741.8
132.5°	754.4	755.4	756.4	757.4	758.4	759.8	761.4	763.0	764.7	766.3	768.8
135°	798.7	799.6	800.5	801.4	802.3	803.2	804.1	805.1	806.0	807.0	809.1
137.5°	839.4	840.2	840.9	841.7	842.5	843.0	843.3	843.7	844.0	844.3	846.6
140°	865.4	865.8	866.1	866.4	866.8	867.0	867.0	867.0	867.0	867.0	869.4
142.5°	889.5	889.5	889.6	889.7	889.7	889.9	890.2	890.5	890.8	891.0	892.9
145°	924.8	925.0	925.1	925.3	925.5	925.6	925.6	925.6	925.6	925.6	926.7
147.5°	954.9	954.8	954.7	954.6	954.6	954.6	954.9	955.1	955.3	955.5	956.0
150°	974.4	974.0	973.7	973.3	973.0	973.0	973.3	973.7	974.0	974.4	974.8
152.5°	993.3	992.5	991.7	990.9	990.1	989.9	990.3	990.6	991.0	991.3	991.7
155°	1017.6	1016.5	1015.4	1014.3	1013.3	1012.8	1013.3	1013.6	1013.9	1014.3	1014.9
157.5°	1036.2	1035.6	1035.0	1034.4	1033.7	1033.4	1033.4	1033.5	1033.5	1033.6	1034.1
160°	1049.3	1048.2	1047.2	1046.0	1045.0	1044.5	1044.7	1044.9	1045.1	1045.2	1045.9
162.5°	1059.7	1058.7	1057.5	1056.5	1055.4	1054.9	1055.1	1055.3	1055.5	1055.6	1056.7
165°	1073.7	1072.6	1071.5	1070.5	1069.4	1068.9	1069.1	1069.3	1069.5	1069.7	1070.7
167.5°	1084.2	1083.0	1081.9	1080.8	1079.7	1079.2	1079.4	1079.5	1079.7	1079.9	1081.2
170°	1090.0	1088.8	1087.4	1086.2	1084.9	1084.4	1084.6	1084.8	1084.9	1085.2	1086.5
172.5°	1093.9	1092.7	1091.4	1090.1	1088.8	1088.4	1088.7	1089.0	1089.3	1089.6	1091.0
175°	1098.1	1097.1	1096.0	1094.9	1093.8	1093.4	1093.6	1093.7	1093.9	1094.1	1095.5
177.5°	1100.1	1099.3	1098.4	1097.5	1096.7	1096.3	1096.4	1096.6	1096.7	1096.8	1097.9
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1



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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°	89.9	95.0	100.0	103.4	105.0	106.6	108.1	109.7
95°	85.0	90.0	95.0	98.2	99.5	100.9	102.2	103.5
97.5°	95.3	94.2	93.0	93.1	94.4	95.6	96.9	98.2
100°	149.9	126.9	103.8	92.5	92.9	93.4	93.8	94.2
102.5°	229.6	228.3	227.0	220.8	209.6	198.4	187.3	176.1
105°	296.7	300.4	304.2	306.6	307.8	308.9	310.1	311.2
107.5°	357.1	360.9	364.6	366.8	367.5	368.0	368.7	369.3
110°	395.9	398.9	401.9	404.2	405.7	407.2	408.7	410.3



TEST NUMBER: P333235-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	434.3	437.0	439.8	441.6	442.7	443.8	444.8	445.9
115°	492.6	495.2	497.9	499.3	499.3	499.4	499.4	499.5
117.5°	548.5	550.7	552.9	554.5	555.3	556.1	556.9	557.7
120°	584.7	587.5	590.4	591.9	592.1	592.3	592.6	592.8
122.5°	618.8	621.4	624.1	625.5	625.6	625.7	625.7	625.8
125°	668.8	671.1	673.4	674.7	675.1	675.5	675.9	676.3
127.5°	714.0	716.3	718.7	719.7	719.5	719.3	719.0	718.8
130°	743.9	745.9	748.0	749.1	749.2	749.2	749.2	749.3
132.5°	771.4	773.9	776.4	777.6	777.5	777.4	777.2	777.1
135°	811.1	813.3	815.3	816.3	816.1	816.0	815.9	815.7
137.5°	848.9	851.2	853.5	854.5	854.4	854.2	853.9	853.8
140°	871.9	874.3	876.8	877.8	877.5	877.1	876.8	876.4
142.5°	894.8	896.6	898.5	899.2	898.9	898.5	898.2	897.9
145°	927.8	929.0	930.1	930.4	930.1	929.8	929.4	929.1
147.5°	956.6	957.1	957.6	957.4	956.4	955.4	954.5	953.5
150°	975.2	975.5	975.8	975.4	974.1	972.9	971.7	970.4
152.5°	992.1	992.5	992.8	992.4	991.1	989.9	988.6	987.2
155°	1015.4	1015.9	1016.5	1016.0	1014.6	1013.1	1011.7	1010.2
157.5°	1034.7	1035.3	1035.8	1035.4	1034.0	1032.5	1031.0	1029.6
160°	1046.7	1047.4	1048.1	1047.7	1046.4	1044.9	1043.4	1042.0
162.5°	1057.7	1058.7	1059.7	1059.4	1057.9	1056.2	1054.7	1053.0
165°	1071.8	1072.9	1074.0	1073.8	1072.4	1070.9	1069.5	1068.0
167.5°	1082.6	1083.9	1085.2	1085.0	1083.4	1081.7	1080.1	1078.5
170°	1088.0	1089.5	1091.0	1090.8	1089.2	1087.6	1086.0	1084.3
172.5°	1092.3	1093.6	1094.9	1094.7	1093.1	1091.4	1089.8	1088.3
175°	1097.0	1098.5	1099.8	1099.8	1098.1	1096.5	1094.9	1093.2
177.5°	1098.9	1099.9	1100.9	1100.8	1099.7	1098.5	1097.4	1096.2
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1

(END OF REPORT)