

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: P333421-927

Luminaire Tested: **S125DIW-S850D1340U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333421-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S850D1340U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6286.8 lumens
Efficiency: N/A
Efficacy: 102.4 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-Indirect

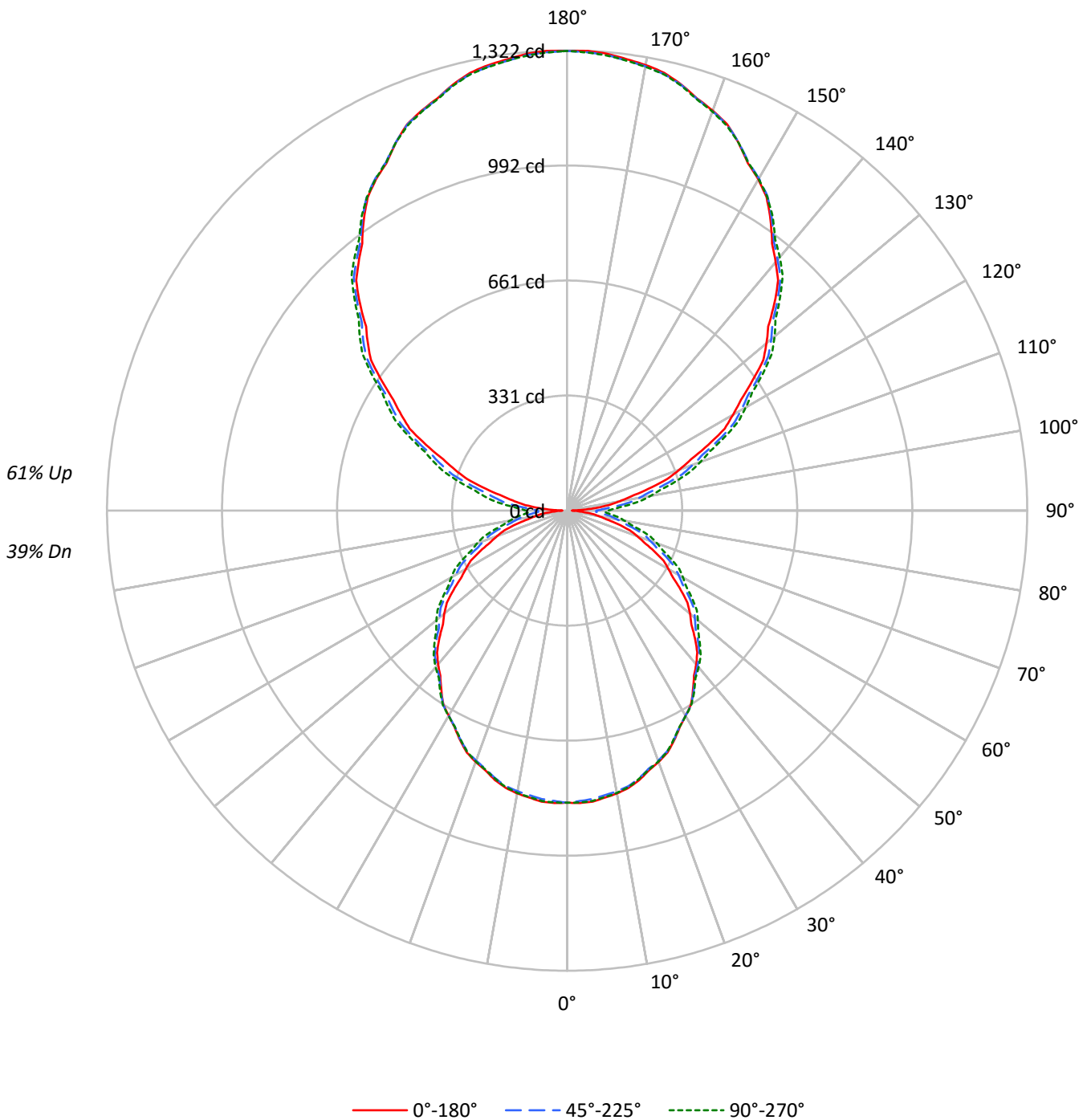
Input Watts (W): 61.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	75	67	64	62	53	51	49	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	42	40	37	34	30	28	26	22
4	71	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	24	21	24	20	17	18	16	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

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	1.3
10°-20°	225.3	3.6
20°-30°	335.0	5.3
30°-40°	396.8	6.3
40°-50°	410.3	6.5
50°-60°	377.9	6.0
60°-70°	305.5	4.9
70°-80°	204.6	3.3
80°-90°	109.0	1.7
90°-100°	148.0	2.4
100°-110°	305.1	4.9
110°-120°	471.8	7.5
120°-130°	598.9	9.5
130°-140°	659.6	10.5
140°-150°	640.8	10.2
150°-160°	537.0	8.5
160°-170°	357.0	5.7
170°-180°	124.9	2.0
0°-30°	639.6	10.2
0°-40°	1036.4	16.5
0°-60°	1824.7	29.0
0°-90°	2443.8	38.9
90°-120°	924.8	14.7
90°-150°	2824.1	44.9
90°-180°	3843.0	61.1
0°-180°	6286.8	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	49	84	107	117	12
95°	78	102	139	164	172	80
105°	242	261	291	313	322	258
115°	448	458	481	494	499	443
125°	650	656	672	683	687	581
135°	842	848	854	864	865	649
145°	1019	1022	1026	1029	1030	637
155°	1165	1165	1166	1170	1165	536
165°	1267	1265	1266	1270	1264	357
175°	1317	1314	1313	1319	1312	125
180°	1320	1320	1320	1320	1320	



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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°	25.9	32.1	38.3	44.5	50.7	57.1	63.6	70.2	76.7	83.3	87.7
90°	14.2	21.9	29.5	37.2	44.9	52.7	60.4	68.3	76.1	83.9	89.3
92.5°	36.7	43.4	50.1	56.8	63.5	71.0	79.3	87.6	95.9	104.3	109.9
95°	77.5	82.7	87.9	93.1	98.3	105.2	113.7	122.2	130.7	139.2	144.8
97.5°	120.6	125.2	129.6	134.0	138.6	145.4	154.5	163.7	172.8	182.0	187.3
100°	152.9	156.8	160.6	164.5	168.3	174.6	183.4	192.3	201.1	209.8	215.8
102.5°	187.6	192.0	196.5	201.0	205.4	211.3	218.5	225.7	232.9	240.1	246.1
105°	241.7	245.7	249.9	253.9	257.9	263.4	270.3	277.1	284.0	290.8	295.9
107.5°	301.5	305.1	308.8	312.4	316.1	321.0	327.3	333.7	340.0	346.3	350.6
110°	342.8	346.2	349.5	352.8	356.2	360.8	366.5	372.3	378.1	384.0	388.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	385.6	387.9	390.2	392.6	395.0	399.0	404.9	410.7	416.5	422.4	426.0
115°	447.8	450.0	452.2	454.4	456.6	460.3	465.5	470.7	475.9	481.2	484.2
117.5°	510.3	511.6	512.8	514.0	515.3	518.4	523.3	528.2	533.1	538.1	541.3
120°	549.8	551.4	553.2	554.8	556.5	559.6	564.0	568.5	572.9	577.3	580.4
122.5°	591.8	592.6	593.2	593.8	594.5	597.1	601.8	606.5	611.2	615.8	618.5
125°	649.7	650.9	652.0	653.2	654.4	657.0	660.8	664.7	668.6	672.5	674.9
127.5°	710.5	711.1	711.7	712.3	712.9	714.8	718.0	721.4	724.6	727.9	730.3
130°	747.5	748.5	749.4	750.4	751.3	753.3	756.3	759.3	762.3	765.3	767.7
132.5°	783.8	785.6	787.5	789.3	791.2	793.0	794.9	796.8	798.7	800.6	802.9
135°	842.2	843.4	844.6	845.8	847.0	848.3	849.9	851.4	852.9	854.4	856.7
137.5°	897.1	898.3	899.5	900.6	901.8	903.0	904.1	905.2	906.3	907.5	909.9
140°	931.8	933.0	934.1	935.3	936.4	937.4	938.3	939.1	940.0	940.9	943.3
142.5°	967.2	968.0	968.8	969.6	970.4	971.3	972.2	973.1	974.0	974.9	976.9
145°	1019.1	1019.9	1020.6	1021.4	1022.1	1022.8	1023.5	1024.1	1024.8	1025.6	1026.4
147.5°	1066.4	1066.9	1067.5	1067.9	1068.4	1069.0	1069.5	1070.1	1070.6	1071.2	1072.0
150°	1098.5	1098.3	1098.0	1097.8	1097.6	1097.9	1098.8	1099.8	1100.7	1101.6	1101.6
152.5°	1124.8	1125.1	1125.5	1125.8	1126.1	1126.4	1126.8	1127.1	1127.5	1127.9	1128.5
155°	1165.3	1165.3	1165.3	1165.3	1165.3	1165.4	1165.6	1165.9	1166.1	1166.3	1167.2
157.5°	1201.4	1200.9	1200.5	1199.9	1199.4	1199.3	1199.5	1199.8	1200.0	1200.2	1201.1
160°	1222.8	1222.2	1221.5	1220.8	1220.1	1219.9	1220.1	1220.4	1220.5	1220.8	1221.7
162.5°	1241.7	1241.3	1240.7	1240.2	1239.8	1239.5	1239.5	1239.6	1239.6	1239.7	1240.8
165°	1267.0	1266.5	1266.1	1265.7	1265.2	1265.1	1265.3	1265.5	1265.7	1266.0	1266.9
167.5°	1288.4	1287.5	1286.6	1285.6	1284.8	1284.3	1284.3	1284.3	1284.3	1284.3	1285.6
170°	1299.9	1299.0	1298.1	1297.2	1296.2	1295.8	1295.8	1295.8	1295.8	1295.8	1297.2
172.5°	1308.1	1307.2	1306.3	1305.4	1304.5	1304.0	1304.0	1304.0	1304.0	1304.0	1305.4
175°	1317.4	1316.4	1315.6	1314.6	1313.8	1313.3	1313.3	1313.3	1313.3	1313.3	1314.6
177.5°	1322.1	1321.4	1320.6	1319.9	1319.1	1318.7	1318.5	1318.3	1318.2	1318.0	1319.1
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5



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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°	92.1	96.6	101.0	103.9	105.4	106.8	108.1	109.6
90°	94.6	100.0	105.3	108.9	110.9	112.9	114.9	116.8
92.5°	115.4	121.0	126.6	130.2	132.0	133.8	135.5	137.4
95°	150.4	156.1	161.7	165.3	167.1	168.8	170.6	172.3
97.5°	192.7	198.0	203.4	206.8	208.3	209.8	211.3	212.8
100°	221.7	227.6	233.5	237.2	238.8	240.3	241.9	243.4
102.5°	252.0	257.9	263.9	267.7	269.4	271.2	272.9	274.6
105°	300.9	305.9	310.9	314.4	316.4	318.4	320.4	322.3
107.5°	354.9	359.2	363.5	366.2	367.3	368.4	369.5	370.6
110°	392.3	396.4	400.6	403.1	404.3	405.3	406.3	407.4



TEST NUMBER: P333421-927

CATALOG NUMBER: S125DIW-S850D1340U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	429.7	433.3	437.0	439.3	440.1	441.0	441.9	442.8
115°	487.3	490.4	493.4	495.4	496.2	497.1	498.0	498.8
117.5°	544.6	547.9	551.2	553.0	553.3	553.7	554.0	554.3
120°	583.5	586.6	589.8	591.4	591.6	591.8	591.9	592.2
122.5°	621.4	624.2	626.9	628.5	628.8	629.2	629.5	629.9
125°	677.4	679.9	682.3	683.9	684.6	685.3	686.0	686.7
127.5°	732.8	735.3	737.8	739.3	739.9	740.5	741.2	741.7
130°	770.0	772.4	774.7	776.1	776.5	777.0	777.4	777.9
132.5°	805.2	807.6	809.8	811.1	811.2	811.4	811.5	811.6
135°	859.1	861.5	863.9	865.1	865.1	865.1	865.1	865.1
137.5°	912.4	914.8	917.2	918.2	917.8	917.4	917.0	916.6
140°	945.8	948.2	950.7	951.7	951.3	950.9	950.5	950.1
142.5°	978.9	980.9	982.9	983.7	983.3	982.9	982.5	982.0
145°	1027.4	1028.3	1029.2	1029.7	1029.7	1029.8	1029.8	1029.8
147.5°	1072.9	1073.6	1074.5	1074.4	1073.1	1071.9	1070.6	1069.4
150°	1101.6	1101.6	1101.6	1101.5	1101.1	1100.9	1100.6	1100.3
152.5°	1128.9	1129.5	1130.0	1130.0	1129.2	1128.4	1127.6	1126.8
155°	1168.2	1169.0	1170.0	1169.8	1168.7	1167.6	1166.4	1165.3
157.5°	1202.1	1202.9	1203.9	1203.6	1202.1	1200.6	1199.0	1197.5
160°	1222.6	1223.5	1224.4	1224.3	1223.2	1222.0	1220.9	1219.7
162.5°	1241.9	1242.9	1244.0	1244.0	1242.6	1241.3	1240.0	1238.7
165°	1267.8	1268.8	1269.6	1269.4	1268.0	1266.7	1265.3	1263.9
167.5°	1287.1	1288.4	1289.8	1289.8	1288.3	1286.9	1285.5	1284.0
170°	1298.5	1299.9	1301.2	1301.2	1299.6	1298.0	1296.3	1294.7
172.5°	1306.8	1308.1	1309.5	1309.5	1308.1	1306.6	1305.2	1303.8
175°	1316.0	1317.4	1318.7	1318.6	1317.0	1315.4	1313.8	1312.2
177.5°	1320.2	1321.3	1322.4	1322.3	1321.0	1319.7	1318.4	1317.2
180°	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5	1320.5

(END OF REPORT)