

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: P333392

Luminaire Tested: **S125DIW-S610D1340U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333392
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: S125DIW-S610D1340U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7866.2 lumens
Efficiency: N/A
Efficacy: 146.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

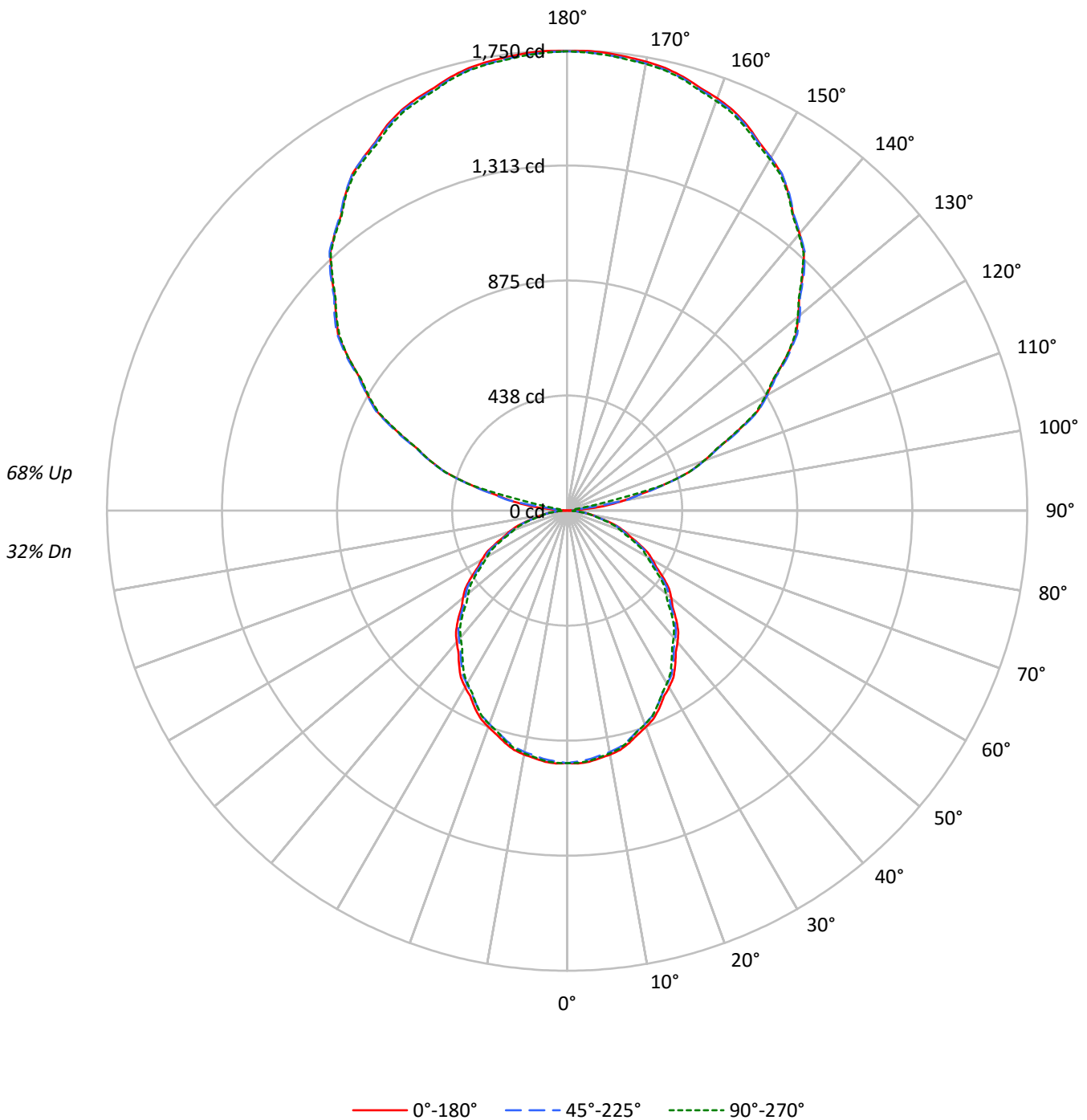
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	56	56	56	39	39	39	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	49	43	40	38	31	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.2
10°-20°	255.8	3.3
20°-30°	377.7	4.8
30°-40°	440.7	5.6
40°-50°	442.6	5.6
50°-60°	388.5	4.9
60°-70°	289.5	3.7
70°-80°	165.5	2.1
80°-90°	51.8	0.7
90°-100°	63.5	0.8
100°-110°	391.2	5.0
110°-120°	709.5	9.0
120°-130°	910.5	11.6
130°-140°	979.3	12.4
140°-150°	919.2	11.7
150°-160°	743.6	9.5
160°-170°	480.9	6.1
170°-180°	165.9	2.1
0°-30°	724.0	9.2
0°-40°	1164.7	14.8
0°-60°	1995.9	25.4
0°-90°	2502.7	31.8
90°-120°	1164.1	14.8
90°-150°	3973.2	50.5
90°-180°	5364.0	68.2
0°-180°	7866.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	1	12	21	27	31	5
95°	74	67	21	27	27	94
105°	381	386	386	386	384	404
115°	715	721	722	717	710	708
125°	1016	1025	1025	1020	1016	907
135°	1268	1275	1273	1270	1262	977
145°	1470	1472	1472	1473	1466	919
155°	1618	1611	1613	1616	1607	745
165°	1708	1700	1701	1708	1699	482
175°	1747	1739	1740	1749	1739	166
180°	1747	1747	1747	1747	1747	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.7	17.1	17.6	18.1	18.5	18.9	19.1	19.4	19.7	19.9	20.2
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.7	22.2
92.5°	19.9	18.3	16.7	15.1	13.5	13.6	15.4	17.1	18.9	20.7	22.2
95°	73.8	72.9	72.1	71.2	70.3	64.4	53.5	42.6	31.6	20.7	22.2
97.5°	154.1	155.6	157.2	158.7	160.3	150.2	128.6	107.0	85.3	63.7	55.6
100°	216.2	217.1	217.9	218.8	219.7	220.7	221.8	223.0	224.1	225.3	182.4
102.5°	279.4	280.5	281.6	282.7	283.8	284.7	285.4	286.1	286.7	287.4	279.3
105°	380.7	381.8	383.0	384.1	385.3	385.8	385.8	385.8	385.8	385.8	385.8
107.5°	485.8	485.8	485.8	485.8	485.8	486.1	486.7	487.2	487.8	488.4	488.4
110°	554.2	554.2	554.2	554.2	554.2	554.4	555.0	555.6	556.2	556.7	555.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	618.4	619.1	619.8	620.4	621.1	621.7	622.0	622.3	622.7	623.0	621.9
115°	714.7	716.1	717.6	719.0	720.5	721.3	721.6	721.9	722.2	722.5	721.3
117.5°	814.4	814.3	814.3	814.2	814.2	814.7	815.8	816.9	818.0	819.1	817.6
120°	876.5	876.3	876.0	875.7	875.4	875.7	876.5	877.4	878.3	879.1	878.6
122.5°	931.4	932.5	933.6	934.7	935.8	936.6	937.0	937.4	937.8	938.2	937.6
125°	1016.4	1018.4	1020.4	1022.4	1024.4	1025.4	1025.4	1025.4	1025.4	1025.4	1024.3
127.5°	1097.4	1098.9	1100.3	1101.7	1103.2	1103.8	1103.6	1103.5	1103.3	1103.1	1102.5
130°	1147.1	1148.6	1150.0	1151.5	1152.9	1153.8	1154.1	1154.3	1154.6	1154.9	1154.1
132.5°	1196.9	1198.5	1200.2	1201.9	1203.5	1204.1	1203.4	1202.8	1202.2	1201.5	1201.4
135°	1267.6	1269.3	1271.0	1272.7	1274.5	1275.0	1274.5	1273.9	1273.3	1272.7	1272.2
137.5°	1332.6	1334.0	1335.5	1337.0	1338.5	1339.0	1338.5	1338.0	1337.5	1337.0	1337.1
140°	1375.0	1375.6	1376.2	1376.7	1377.3	1377.5	1377.2	1376.9	1376.6	1376.3	1376.9
142.5°	1413.3	1413.7	1414.0	1414.4	1414.7	1415.1	1415.5	1415.9	1416.3	1416.7	1416.8
145°	1469.5	1470.1	1470.7	1471.3	1471.8	1472.1	1472.1	1472.1	1472.1	1472.1	1472.4
147.5°	1518.7	1518.6	1518.5	1518.4	1518.3	1518.4	1518.7	1519.1	1519.4	1519.8	1520.1
150°	1549.8	1549.2	1548.7	1548.1	1547.5	1547.5	1548.1	1548.7	1549.2	1549.8	1550.4
152.5°	1579.8	1578.6	1577.3	1576.1	1574.8	1574.4	1575.0	1575.6	1576.2	1576.7	1577.3
155°	1618.4	1616.7	1615.0	1613.3	1611.5	1611.0	1611.5	1612.1	1612.7	1613.3	1614.1
157.5°	1648.2	1647.2	1646.1	1645.1	1644.1	1643.6	1643.6	1643.7	1643.8	1643.8	1644.7
160°	1668.9	1667.2	1665.5	1663.7	1662.0	1661.3	1661.6	1661.9	1662.2	1662.5	1663.6
162.5°	1685.5	1683.8	1682.0	1680.3	1678.6	1677.9	1678.2	1678.5	1678.7	1679.0	1680.6
165°	1707.8	1706.0	1704.3	1702.6	1700.9	1700.1	1700.4	1700.7	1701.0	1701.3	1703.0
167.5°	1724.3	1722.6	1720.8	1719.0	1717.2	1716.5	1716.7	1717.0	1717.3	1717.6	1719.7
170°	1733.7	1731.7	1729.6	1727.6	1725.6	1724.7	1725.0	1725.3	1725.6	1725.9	1728.2
172.5°	1739.9	1737.9	1735.9	1733.8	1731.8	1731.1	1731.6	1732.1	1732.6	1733.1	1735.2
175°	1746.6	1744.9	1743.2	1741.4	1739.7	1739.0	1739.3	1739.6	1739.9	1740.1	1742.4
177.5°	1749.7	1748.3	1747.0	1745.6	1744.2	1743.6	1743.9	1744.1	1744.3	1744.5	1746.2
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	20.5	20.8	21.1	21.2	21.1	21.0	20.9	20.8
90°	23.6	25.0	26.5	27.6	28.5	29.3	30.2	31.1
92.5°	23.6	25.0	26.5	27.4	27.8	28.2	28.6	29.0
95°	23.6	25.0	26.5	27.2	27.2	27.2	27.2	27.2
97.5°	47.5	39.4	31.2	27.2	27.2	27.2	27.2	27.2
100°	139.5	96.7	53.8	31.8	30.6	29.5	28.3	27.2
102.5°	271.2	263.1	255.0	241.1	221.6	202.0	182.4	162.9
105°	385.8	385.8	385.8	385.7	385.4	385.1	384.8	384.5
107.5°	488.5	488.6	488.6	488.2	487.3	486.5	485.6	484.8
110°	555.0	554.2	553.3	553.0	553.3	553.6	553.9	554.2



TEST NUMBER: P333392

CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	620.8	619.8	618.7	617.9	617.5	617.1	616.7	616.3
115°	720.2	719.0	717.9	716.4	714.7	713.0	711.2	709.5
117.5°	816.1	814.6	813.1	811.9	811.2	810.5	809.7	809.0
120°	878.0	877.4	876.8	875.8	874.4	872.9	871.5	870.1
122.5°	937.0	936.4	935.9	934.7	933.1	931.4	929.7	928.1
125°	1023.1	1022.0	1020.8	1019.8	1019.0	1018.1	1017.2	1016.4
127.5°	1101.9	1101.2	1100.6	1099.2	1097.1	1095.0	1092.8	1090.7
130°	1153.2	1152.3	1151.5	1150.3	1148.9	1147.4	1146.0	1144.6
132.5°	1201.2	1201.0	1200.8	1200.0	1198.6	1197.2	1195.7	1194.3
135°	1271.6	1271.0	1270.4	1269.3	1267.6	1265.8	1264.1	1262.4
137.5°	1337.2	1337.3	1337.4	1336.7	1335.2	1333.7	1332.2	1330.7
140°	1377.5	1378.0	1378.6	1378.0	1376.3	1374.6	1372.9	1371.1
142.5°	1416.9	1417.1	1417.2	1416.4	1414.6	1412.9	1411.2	1409.5
145°	1472.7	1473.0	1473.3	1472.6	1470.8	1469.1	1467.4	1465.7
147.5°	1520.5	1520.8	1521.2	1520.3	1518.2	1516.1	1514.1	1512.0
150°	1551.0	1551.5	1552.1	1551.2	1548.9	1546.6	1544.3	1542.0
152.5°	1577.9	1578.5	1579.0	1578.3	1576.2	1574.2	1572.1	1570.0
155°	1615.0	1615.8	1616.7	1616.0	1613.7	1611.4	1609.1	1606.8
157.5°	1645.7	1646.6	1647.5	1646.8	1644.5	1642.2	1639.9	1637.6
160°	1664.8	1665.9	1667.1	1666.5	1664.2	1661.9	1659.6	1657.3
162.5°	1682.2	1683.9	1685.5	1685.0	1682.5	1679.9	1677.4	1674.9
165°	1704.7	1706.5	1708.2	1707.9	1705.6	1703.3	1701.0	1698.7
167.5°	1721.8	1723.8	1725.9	1725.6	1723.0	1720.5	1717.9	1715.3
170°	1730.5	1732.8	1735.1	1735.0	1732.4	1729.8	1727.2	1724.6
172.5°	1737.3	1739.4	1741.4	1741.2	1738.6	1736.0	1733.4	1730.8
175°	1744.7	1747.0	1749.3	1749.2	1746.6	1744.0	1741.4	1738.8
177.5°	1747.8	1749.4	1751.0	1750.9	1749.0	1747.2	1745.3	1743.5
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6

(END OF REPORT)