

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: P333391

Luminaire Tested: **S125DIW-S610D1340U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333391
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-S610D1340U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 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: 7055.3 lumens
Efficiency: N/A
Efficacy: 131.1 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

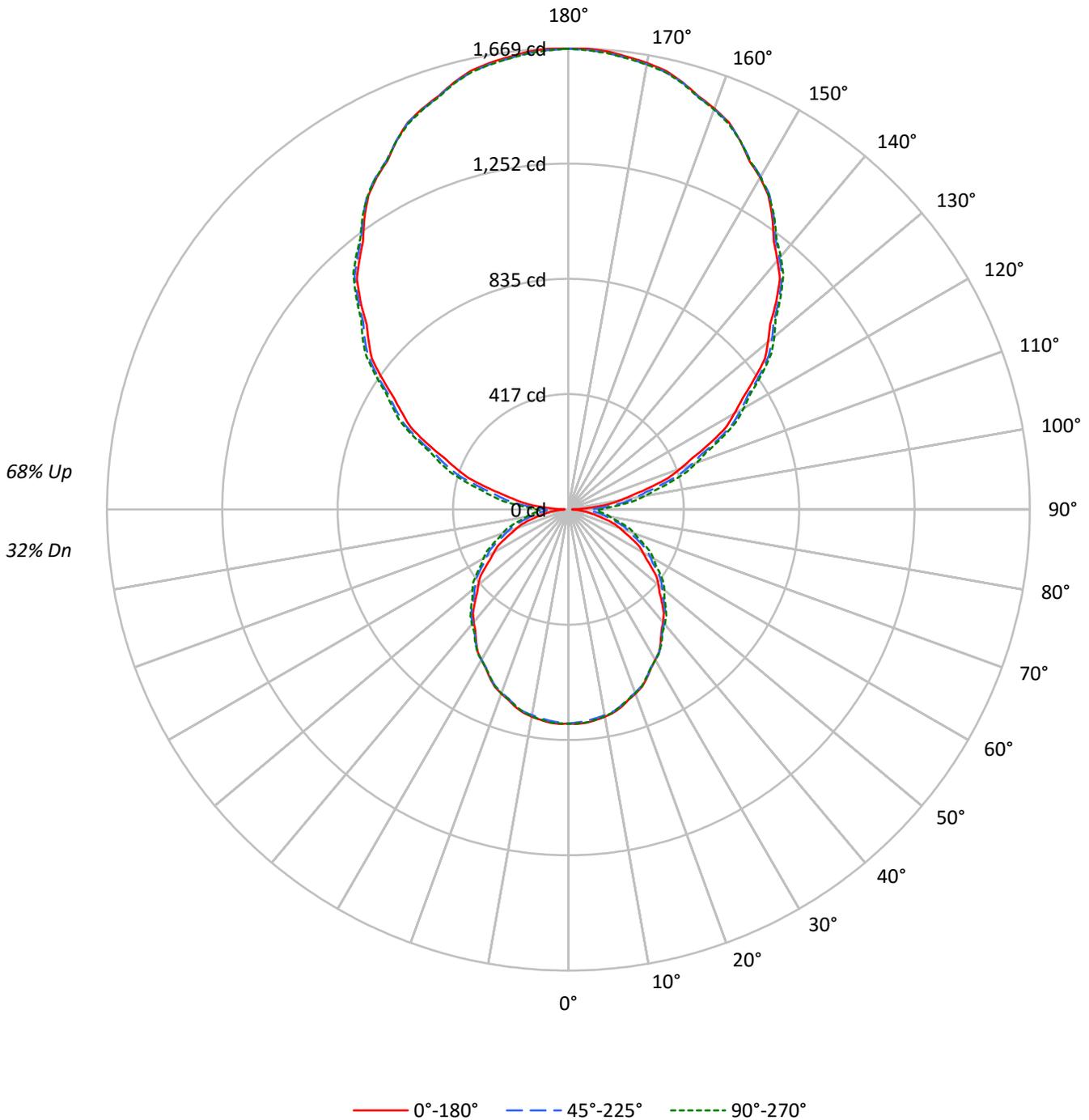
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	63	61	59	48	47	45	34	33	32	26
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.0
10°-20°	208.0	2.9
20°-30°	309.4	4.4
30°-40°	366.5	5.2
40°-50°	378.9	5.4
50°-60°	349.0	4.9
60°-70°	282.1	4.0
70°-80°	189.0	2.7
80°-90°	101.6	1.4
90°-100°	166.6	2.4
100°-110°	370.2	5.2
110°-120°	585.6	8.3
120°-130°	750.3	10.6
130°-140°	830.2	11.8
140°-150°	808.4	11.5
150°-160°	677.9	9.6
160°-170°	450.6	6.4
170°-180°	157.7	2.2
0°-30°	590.7	8.4
0°-40°	957.1	13.6
0°-60°	1685.1	23.9
0°-90°	2257.8	32.0
90°-120°	1122.4	15.9
90°-150°	3511.3	49.8
90°-180°	4797.0	68.0
0°-180°	7055.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	14	48	83	106	116	13
95°	94	118	155	180	189	98
105°	303	322	352	374	384	323
115°	564	575	596	608	612	557
125°	819	826	842	852	854	733
135°	1063	1070	1076	1086	1085	819
145°	1286	1291	1295	1298	1298	804
155°	1471	1471	1472	1477	1471	677
165°	1599	1597	1598	1603	1596	451
175°	1663	1658	1658	1665	1656	158
180°	1667	1667	1667	1667	1667	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	24.0	29.8	35.7	41.6	47.4	53.4	59.6	65.7	71.9	78.0	82.2
90°	13.5	21.2	28.9	36.6	44.3	52.0	59.8	67.5	75.3	83.1	88.4
92.5°	42.3	48.9	55.6	62.2	68.8	76.3	84.6	93.0	101.3	109.7	115.3
95°	94.2	99.2	104.1	109.1	114.1	120.9	129.5	138.1	146.7	155.3	161.1
97.5°	149.1	153.2	157.4	161.6	165.8	172.6	182.1	191.7	201.2	210.7	216.1
100°	190.0	193.5	197.1	200.6	204.1	210.5	219.6	228.8	237.9	247.1	253.2
102.5°	234.0	238.4	242.8	247.3	251.7	257.5	264.7	271.8	279.0	286.2	292.4
105°	302.6	306.7	310.9	315.0	319.2	324.6	331.4	338.2	345.0	351.8	356.9
107.5°	378.5	382.2	385.9	389.7	393.4	398.4	404.6	410.8	417.0	423.1	427.3
110°	430.8	434.3	437.7	441.2	444.7	449.2	454.8	460.4	466.0	471.6	475.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	484.7	487.1	489.5	491.9	494.2	498.3	503.9	509.6	515.3	521.0	524.5
115°	563.6	566.0	568.3	570.6	573.0	576.6	581.6	586.6	591.5	596.5	599.2
117.5°	642.8	644.1	645.4	646.7	648.0	650.9	655.6	660.3	665.0	669.6	672.7
120°	692.6	694.5	696.5	698.4	700.4	703.4	707.6	711.8	716.0	720.1	723.0
122.5°	745.9	746.7	747.5	748.2	749.0	751.6	756.1	760.6	765.1	769.6	772.1
125°	819.0	820.5	822.1	823.6	825.2	827.8	831.5	835.1	838.8	842.5	844.6
127.5°	896.0	896.8	897.6	898.5	899.3	901.2	904.3	907.5	910.6	913.7	915.9
130°	942.7	944.0	945.3	946.5	947.8	949.9	952.9	955.8	958.7	961.7	963.8
132.5°	988.8	991.1	993.5	995.8	998.1	1000.2	1001.9	1003.6	1005.3	1007.0	1009.1
135°	1062.6	1064.2	1065.7	1067.3	1068.8	1070.4	1071.8	1073.3	1074.8	1076.2	1078.4
137.5°	1132.0	1133.5	1135.0	1136.6	1138.1	1139.5	1140.7	1141.9	1143.1	1144.3	1146.7
140°	1176.0	1177.4	1178.9	1180.3	1181.8	1183.0	1184.0	1185.1	1186.1	1187.1	1189.6
142.5°	1220.6	1221.7	1222.8	1223.8	1224.9	1226.0	1227.1	1228.3	1229.4	1230.5	1232.5
145°	1286.2	1287.2	1288.2	1289.2	1290.2	1291.1	1292.0	1292.8	1293.7	1294.6	1295.4
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1353.1
150°	1386.7	1386.4	1386.1	1385.8	1385.5	1385.9	1387.1	1388.3	1389.4	1390.6	1390.6
152.5°	1419.9	1420.3	1420.7	1421.1	1421.5	1421.9	1422.4	1422.8	1423.3	1423.8	1424.5
155°	1471.0	1471.0	1471.0	1471.0	1471.0	1471.1	1471.4	1471.7	1472.0	1472.3	1473.4
157.5°	1516.6	1516.0	1515.4	1514.7	1514.1	1513.9	1514.2	1514.5	1514.8	1515.1	1516.2
160°	1543.6	1542.8	1541.9	1541.0	1540.2	1539.9	1540.2	1540.5	1540.7	1541.0	1542.2
162.5°	1567.5	1566.9	1566.2	1565.6	1565.0	1564.7	1564.7	1564.8	1564.8	1564.9	1566.3
165°	1599.4	1598.8	1598.2	1597.7	1597.1	1597.0	1597.2	1597.5	1597.8	1598.1	1599.3
167.5°	1626.4	1625.2	1624.1	1622.9	1621.8	1621.2	1621.2	1621.2	1621.2	1621.2	1622.9
170°	1640.9	1639.8	1638.6	1637.5	1636.3	1635.7	1635.7	1635.7	1635.7	1635.7	1637.5
172.5°	1651.3	1650.1	1649.0	1647.8	1646.7	1646.1	1646.1	1646.1	1646.1	1646.1	1647.8
175°	1663.0	1661.8	1660.7	1659.5	1658.4	1657.8	1657.8	1657.8	1657.8	1657.8	1659.5
177.5°	1668.9	1668.0	1667.1	1666.2	1665.2	1664.7	1664.4	1664.2	1664.0	1663.7	1665.1
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	86.3	90.5	94.7	97.5	98.8	100.2	101.5	102.9
90°	93.7	99.0	104.4	108.0	110.1	112.1	114.2	116.2
92.5°	121.0	126.6	132.3	136.0	137.8	139.7	141.5	143.3
95°	166.8	172.5	178.3	182.0	183.8	185.5	187.3	189.1
97.5°	221.6	227.0	232.5	236.0	237.5	238.9	240.4	241.9
100°	259.4	265.5	271.7	275.5	277.1	278.7	280.3	281.9
102.5°	298.6	304.9	311.1	315.1	317.0	318.8	320.6	322.4
105°	362.0	367.1	372.2	375.8	377.9	379.9	382.0	384.0
107.5°	431.6	435.8	440.0	442.6	443.6	444.5	445.5	446.5
110°	479.7	483.8	487.8	490.3	491.2	492.1	493.0	493.9



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CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	528.0	531.4	534.9	537.0	537.7	538.3	539.0	539.6
115°	602.0	604.7	607.5	609.2	610.0	610.7	611.4	612.1
117.5°	675.8	678.9	682.0	683.6	683.6	683.6	683.6	683.6
120°	725.9	728.7	731.6	733.0	732.8	732.7	732.6	732.4
122.5°	774.6	777.1	779.6	780.9	781.0	781.1	781.2	781.3
125°	846.7	848.8	851.0	852.3	852.9	853.4	854.0	854.5
127.5°	918.1	920.3	922.5	923.8	924.2	924.6	925.0	925.5
130°	965.8	967.9	970.0	971.2	971.4	971.7	972.0	972.2
132.5°	1011.1	1013.2	1015.3	1016.3	1016.2	1016.1	1016.0	1015.9
135°	1080.6	1082.8	1085.0	1086.0	1085.7	1085.3	1085.0	1084.7
137.5°	1149.0	1151.3	1153.7	1154.5	1153.7	1152.9	1152.2	1151.4
140°	1192.0	1194.4	1196.9	1197.7	1196.9	1196.2	1195.4	1194.6
142.5°	1234.4	1236.3	1238.3	1238.8	1238.1	1237.3	1236.6	1235.8
145°	1296.3	1297.1	1297.9	1298.3	1298.1	1297.9	1297.7	1297.5
147.5°	1354.1	1355.0	1356.0	1355.7	1354.0	1352.4	1350.7	1349.0
150°	1390.6	1390.6	1390.6	1390.4	1389.9	1389.5	1389.1	1388.7
152.5°	1425.1	1425.8	1426.5	1426.4	1425.4	1424.4	1423.4	1422.4
155°	1474.6	1475.7	1476.9	1476.7	1475.3	1473.9	1472.4	1471.0
157.5°	1517.4	1518.5	1519.7	1519.3	1517.4	1515.5	1513.6	1511.7
160°	1543.3	1544.5	1545.6	1545.5	1544.1	1542.6	1541.2	1539.7
162.5°	1567.7	1569.0	1570.4	1570.3	1568.6	1566.9	1565.3	1563.6
165°	1600.4	1601.6	1602.7	1602.4	1600.7	1599.0	1597.2	1595.5
167.5°	1624.7	1626.4	1628.1	1628.1	1626.3	1624.5	1622.7	1620.9
170°	1639.2	1640.9	1642.6	1642.5	1640.5	1638.5	1636.4	1634.4
172.5°	1649.6	1651.3	1653.0	1653.0	1651.2	1649.4	1647.6	1645.8
175°	1661.2	1663.0	1664.7	1664.5	1662.5	1660.5	1658.5	1656.5
177.5°	1666.5	1667.9	1669.3	1669.2	1667.5	1665.9	1664.3	1662.7
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9

(END OF REPORT)