

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: P333397-830

Luminaire Tested: **S125DIW-S610D1560U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333397-830
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-S610D1560U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7363.6 lumens
Efficiency: N/A
Efficacy: 121.5 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

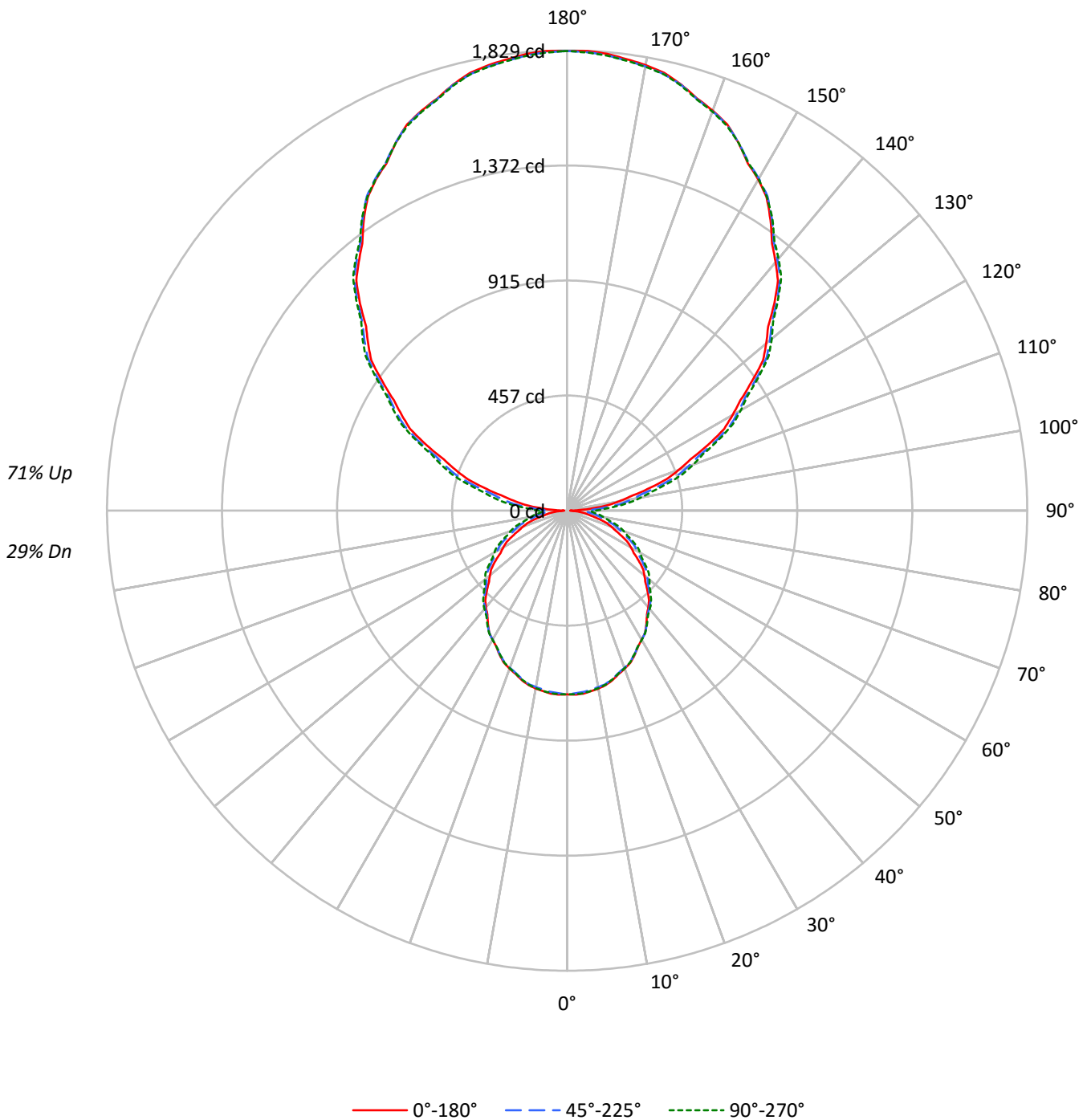
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	47	43	40	35	33	30	24	23	21	16
4	70	59	52	46	62	53	47	42	42	37	33	31	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	32	29	28	25	22	19	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	19	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	12	11	8
9	47	35	27	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	43	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	0.9
10°-20°	196.1	2.7
20°-30°	291.6	4.0
30°-40°	345.4	4.7
40°-50°	357.1	4.8
50°-60°	329.0	4.5
60°-70°	265.9	3.6
70°-80°	178.1	2.4
80°-90°	96.3	1.3
90°-100°	174.2	2.4
100°-110°	399.5	5.4
110°-120°	637.5	8.7
120°-130°	819.9	11.1
130°-140°	908.7	12.3
140°-150°	885.7	12.0
150°-160°	742.8	10.1
160°-170°	493.8	6.7
170°-180°	172.8	2.3
0°-30°	556.7	7.6
0°-40°	902.2	12.3
0°-60°	1588.2	21.6
0°-90°	2128.6	28.9
90°-120°	1211.2	16.4
90°-150°	3825.5	52.0
90°-180°	5235.0	71.1
0°-180°	7363.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	13	47	81	104	114	13
95°	102	124	162	186	195	106
105°	330	350	379	401	411	353
115°	617	628	649	660	664	610
125°	897	905	921	929	931	803
135°	1164	1172	1178	1187	1186	897
145°	1409	1414	1419	1422	1421	881
155°	1612	1612	1613	1618	1612	742
165°	1753	1750	1751	1756	1748	494
175°	1822	1817	1817	1824	1815	173
180°	1827	1827	1827	1827	1827	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.6	28.2	33.8	39.4	45.1	50.7	56.6	62.5	68.3	74.2	78.1
90°	12.9	20.5	28.1	35.7	43.4	51.0	58.6	66.3	73.8	81.4	86.7
92.5°	44.7	51.2	57.7	64.2	70.6	78.0	86.2	94.5	102.7	111.0	116.6
95°	101.7	106.5	111.2	116.0	120.7	127.4	136.0	144.6	153.2	161.7	167.5
97.5°	161.9	166.0	169.9	173.9	177.9	184.6	194.3	203.8	213.4	223.0	228.4
100°	206.9	210.2	213.6	216.9	220.3	226.5	235.7	245.0	254.1	263.3	269.5
102.5°	255.2	259.6	263.9	268.2	272.6	278.3	285.4	292.4	299.4	306.5	312.8
105°	330.5	334.7	338.8	342.9	347.0	352.4	359.1	365.8	372.5	379.1	384.2
107.5°	413.9	417.5	421.3	425.1	428.9	433.7	439.8	445.8	451.9	457.9	461.9
110°	471.3	474.8	478.2	481.7	485.2	489.7	495.1	500.5	505.9	511.3	515.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	530.4	532.7	535.1	537.4	539.8	543.8	549.2	554.8	560.3	565.8	569.2
115°	617.0	619.3	621.7	624.1	626.5	630.1	634.8	639.6	644.3	649.1	651.7
117.5°	703.8	705.1	706.4	707.8	709.0	711.9	716.4	720.9	725.4	729.8	732.8
120°	758.4	760.4	762.5	764.6	766.7	769.7	773.6	777.6	781.6	785.5	788.2
122.5°	817.0	817.7	818.5	819.4	820.1	822.7	827.1	831.4	835.8	840.1	842.4
125°	897.0	898.7	900.5	902.2	903.9	906.5	910.0	913.5	917.1	920.6	922.5
127.5°	981.6	982.5	983.4	984.3	985.2	987.2	990.1	993.2	996.2	999.1	1001.2
130°	1032.7	1034.2	1035.6	1037.0	1038.4	1040.6	1043.4	1046.3	1049.1	1052.0	1054.0
132.5°	1083.4	1085.9	1088.4	1091.0	1093.5	1095.6	1097.2	1098.8	1100.4	1102.0	1103.9
135°	1164.2	1165.9	1167.7	1169.4	1171.2	1172.7	1174.2	1175.6	1177.0	1178.5	1180.5
137.5°	1240.3	1242.0	1243.7	1245.4	1247.1	1248.6	1249.8	1251.0	1252.3	1253.5	1255.7
140°	1288.6	1290.2	1291.8	1293.4	1295.0	1296.3	1297.4	1298.4	1299.6	1300.7	1303.1
142.5°	1337.5	1338.7	1339.9	1341.1	1342.3	1343.5	1344.7	1346.0	1347.2	1348.4	1350.3
145°	1409.4	1410.5	1411.6	1412.8	1413.8	1414.9	1415.8	1416.7	1417.7	1418.6	1419.5
147.5°	1475.3	1475.9	1476.6	1477.3	1478.0	1478.8	1479.5	1480.3	1481.0	1481.8	1482.8
150°	1519.6	1519.3	1519.0	1518.6	1518.3	1518.8	1520.0	1521.4	1522.6	1523.9	1523.9
152.5°	1555.9	1556.4	1556.9	1557.3	1557.7	1558.2	1558.8	1559.2	1559.7	1560.3	1561.0
155°	1612.0	1612.0	1612.0	1612.0	1612.0	1612.1	1612.5	1612.8	1613.1	1613.4	1614.7
157.5°	1662.0	1661.3	1660.7	1659.9	1659.3	1659.1	1659.3	1659.7	1660.0	1660.3	1661.6
160°	1691.6	1690.6	1689.7	1688.8	1687.8	1687.5	1687.8	1688.1	1688.5	1688.8	1690.0
162.5°	1717.8	1717.0	1716.4	1715.7	1715.0	1714.7	1714.7	1714.8	1714.9	1714.9	1716.5
165°	1752.8	1752.1	1751.4	1750.9	1750.2	1750.0	1750.4	1750.7	1751.0	1751.3	1752.6
167.5°	1782.3	1781.0	1779.8	1778.5	1777.3	1776.6	1776.6	1776.6	1776.6	1776.6	1778.5
170°	1798.2	1797.0	1795.6	1794.4	1793.2	1792.5	1792.5	1792.5	1792.5	1792.5	1794.4
172.5°	1809.6	1808.4	1807.0	1805.8	1804.5	1803.9	1803.9	1803.9	1803.9	1803.9	1805.8
175°	1822.4	1821.1	1819.9	1818.5	1817.3	1816.7	1816.7	1816.7	1816.7	1816.7	1818.5
177.5°	1828.9	1827.9	1826.9	1825.9	1824.9	1824.2	1824.0	1823.7	1823.4	1823.3	1824.8
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	82.1	86.1	90.1	92.7	94.0	95.3	96.6	97.9
90°	92.0	97.2	102.5	106.0	108.1	110.2	112.3	114.3
92.5°	122.2	127.9	133.5	137.2	139.0	140.8	142.6	144.4
95°	173.1	178.9	184.5	188.3	190.0	191.8	193.5	195.3
97.5°	233.8	239.2	244.7	248.2	249.6	251.1	252.5	254.0
100°	275.7	281.9	288.0	291.9	293.5	295.1	296.7	298.3
102.5°	319.1	325.5	331.8	335.8	337.7	339.5	341.4	343.2
105°	389.3	394.4	399.4	403.0	405.1	407.2	409.2	411.2
107.5°	466.1	470.1	474.3	476.7	477.7	478.6	479.6	480.4
110°	519.2	523.2	527.2	529.5	530.4	531.1	532.0	532.7



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CATALOG NUMBER: S125DIW-S610D1560U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	572.5	575.9	579.2	581.2	581.7	582.2	582.8	583.3
115°	654.2	656.8	659.3	660.9	661.6	662.2	662.8	663.5
117.5°	735.7	738.8	741.7	743.1	742.9	742.7	742.5	742.3
120°	791.0	793.6	796.4	797.6	797.3	796.9	796.6	796.4
122.5°	844.8	847.1	849.4	850.6	850.5	850.5	850.4	850.4
125°	924.4	926.3	928.2	929.4	929.9	930.4	930.9	931.3
127.5°	1003.2	1005.2	1007.3	1008.4	1008.7	1009.1	1009.4	1009.7
130°	1055.8	1057.7	1059.6	1060.6	1060.8	1061.0	1061.2	1061.3
132.5°	1105.9	1107.8	1109.7	1110.5	1110.3	1110.1	1109.8	1109.7
135°	1182.6	1184.7	1186.8	1187.5	1187.0	1186.6	1186.2	1185.7
137.5°	1258.0	1260.3	1262.5	1263.2	1262.3	1261.3	1260.4	1259.4
140°	1305.4	1307.9	1310.2	1311.0	1310.0	1309.1	1308.2	1307.2
142.5°	1352.2	1354.1	1355.9	1356.4	1355.5	1354.5	1353.6	1352.6
145°	1420.2	1421.1	1421.8	1422.1	1421.8	1421.4	1421.2	1420.9
147.5°	1483.8	1484.8	1485.8	1485.4	1483.6	1481.7	1479.8	1478.0
150°	1523.9	1523.9	1523.9	1523.6	1523.1	1522.7	1522.2	1521.7
152.5°	1561.8	1562.5	1563.3	1563.1	1562.0	1560.9	1559.8	1558.7
155°	1615.9	1617.2	1618.4	1618.3	1616.7	1615.1	1613.5	1612.0
157.5°	1662.8	1664.2	1665.4	1665.0	1662.8	1660.8	1658.7	1656.6
160°	1691.3	1692.5	1693.8	1693.7	1692.1	1690.5	1688.9	1687.3
162.5°	1718.0	1719.5	1721.0	1720.8	1719.0	1717.1	1715.3	1713.4
165°	1753.8	1755.1	1756.3	1756.1	1754.2	1752.3	1750.4	1748.4
167.5°	1780.4	1782.3	1784.1	1784.1	1782.2	1780.3	1778.3	1776.3
170°	1796.3	1798.2	1800.1	1800.0	1797.7	1795.5	1793.3	1791.1
172.5°	1807.7	1809.6	1811.5	1811.5	1809.5	1807.5	1805.5	1803.6
175°	1820.5	1822.4	1824.3	1824.1	1821.9	1819.7	1817.5	1815.2
177.5°	1826.3	1827.8	1829.3	1829.2	1827.4	1825.6	1823.8	1822.1
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6

(END OF REPORT)