

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

Luminaire Tested: **S125DIW-S610D1560U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333397
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-S610D1560U835-4F0-1E-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: 7812.4 lumens
Efficiency: N/A
Efficacy: 128.9 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

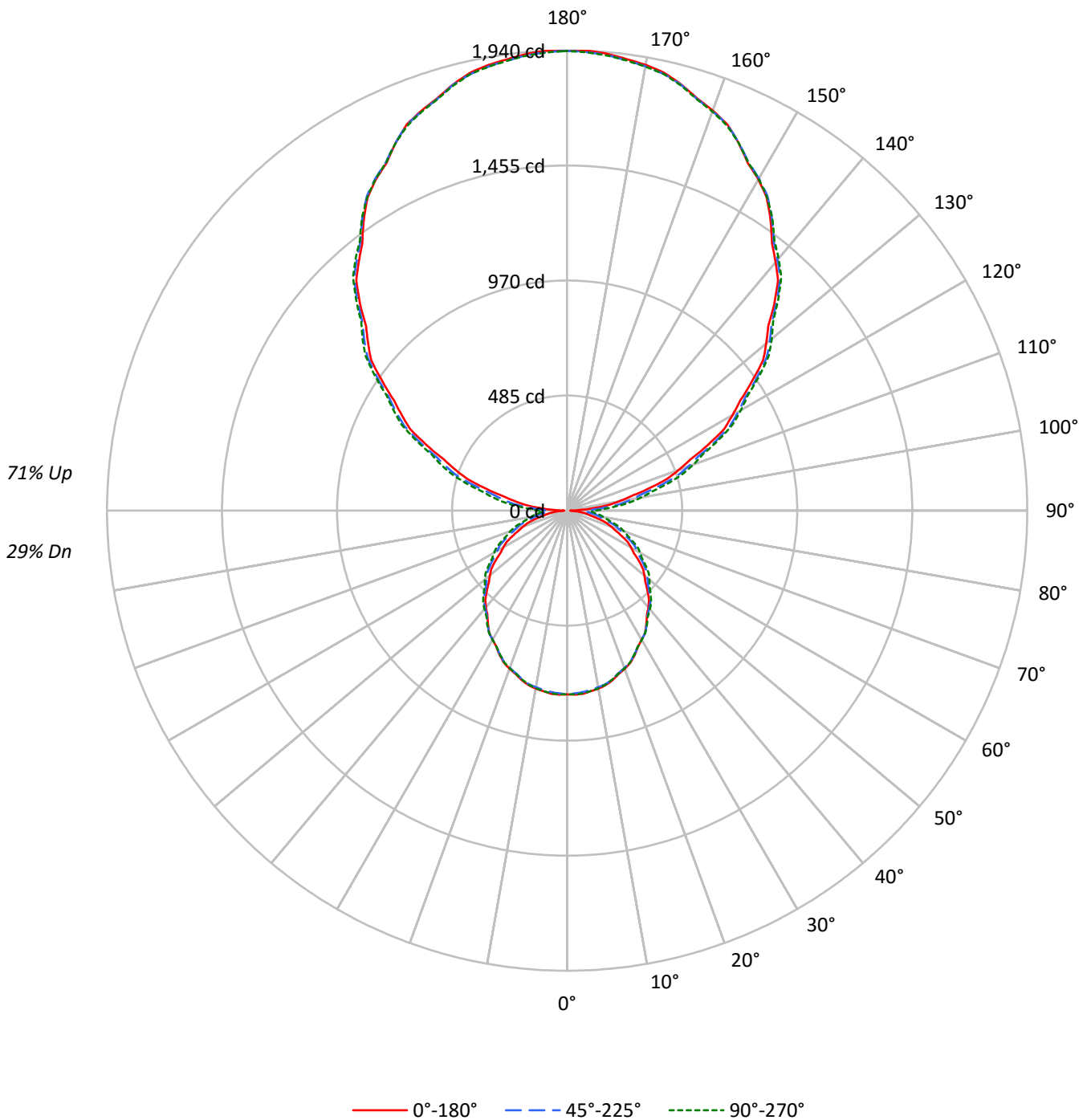
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	0.9
10°-20°	208.0	2.7
20°-30°	309.4	4.0
30°-40°	366.5	4.7
40°-50°	378.9	4.8
50°-60°	349.0	4.5
60°-70°	282.1	3.6
70°-80°	189.0	2.4
80°-90°	102.2	1.3
90°-100°	184.8	2.4
100°-110°	423.8	5.4
110°-120°	676.4	8.7
120°-130°	869.9	11.1
130°-140°	964.1	12.3
140°-150°	939.7	12.0
150°-160°	788.1	10.1
160°-170°	523.9	6.7
170°-180°	183.3	2.3
0°-30°	590.7	7.6
0°-40°	957.1	12.3
0°-60°	1685.1	21.6
0°-90°	2258.4	28.9
90°-120°	1285.0	16.4
90°-150°	4058.7	52.0
90°-180°	5554.0	71.1
0°-180°	7812.4	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	50	86	111	121	14
95°	108	132	172	198	207	112
105°	351	371	402	426	436	374
115°	655	667	689	700	704	647
125°	952	960	977	985	988	852
135°	1235	1243	1250	1260	1258	952
145°	1495	1501	1505	1509	1508	934
155°	1710	1710	1712	1717	1710	787
165°	1860	1857	1858	1863	1855	524
175°	1934	1928	1927	1935	1926	184
180°	1938	1938	1938	1938	1938	



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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	29.9	35.9	41.8	47.8	53.8	60.0	66.3	72.5	78.7	82.9
90°	13.7	21.7	29.8	37.9	46.0	54.1	62.2	70.3	78.3	86.4	92.0
92.5°	47.4	54.3	61.2	68.1	74.9	82.8	91.5	100.3	109.0	117.8	123.7
95°	107.9	113.0	118.0	123.1	128.1	135.2	144.3	153.4	162.5	171.6	177.7
97.5°	171.8	176.1	180.3	184.5	188.7	195.9	206.1	216.2	226.4	236.6	242.3
100°	219.5	223.0	226.6	230.1	233.7	240.3	250.1	259.9	269.6	279.4	285.9
102.5°	270.8	275.4	280.0	284.6	289.2	295.3	302.8	310.2	317.7	325.2	331.9
105°	350.7	355.1	359.5	363.8	368.2	373.9	381.0	388.1	395.2	402.2	407.6
107.5°	439.1	443.0	447.0	451.0	455.0	460.1	466.6	473.0	479.4	485.8	490.1
110°	500.0	503.7	507.4	511.1	514.8	519.5	525.3	531.0	536.7	542.5	546.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	562.7	565.2	567.7	570.2	572.7	576.9	582.7	588.6	594.5	600.3	603.9
115°	654.6	657.1	659.6	662.1	664.7	668.5	673.5	678.6	683.6	688.7	691.4
117.5°	746.7	748.1	749.5	750.9	752.2	755.3	760.1	764.8	769.6	774.3	777.5
120°	804.6	806.8	809.0	811.2	813.4	816.6	820.8	825.0	829.2	833.4	836.3
122.5°	866.8	867.6	868.4	869.3	870.1	872.9	877.5	882.1	886.7	891.3	893.8
125°	951.7	953.5	955.4	957.2	959.0	961.8	965.5	969.2	973.0	976.7	978.7
127.5°	1041.4	1042.4	1043.3	1044.3	1045.3	1047.4	1050.5	1053.7	1056.9	1060.0	1062.2
130°	1095.7	1097.2	1098.7	1100.2	1101.7	1104.0	1107.0	1110.1	1113.1	1116.1	1118.2
132.5°	1149.4	1152.1	1154.8	1157.5	1160.2	1162.4	1164.1	1165.8	1167.5	1169.2	1171.2
135°	1235.2	1237.0	1238.9	1240.7	1242.6	1244.2	1245.8	1247.3	1248.8	1250.3	1252.5
137.5°	1315.9	1317.7	1319.5	1321.3	1323.1	1324.7	1326.0	1327.3	1328.6	1329.9	1332.3
140°	1367.2	1368.8	1370.5	1372.2	1373.9	1375.3	1376.5	1377.6	1378.8	1380.0	1382.5
142.5°	1419.0	1420.3	1421.6	1422.9	1424.1	1425.4	1426.7	1428.0	1429.3	1430.6	1432.6
145°	1495.3	1496.5	1497.7	1498.9	1500.0	1501.1	1502.1	1503.1	1504.1	1505.1	1506.0
147.5°	1565.2	1565.9	1566.6	1567.4	1568.1	1568.9	1569.7	1570.5	1571.3	1572.1	1573.2
150°	1612.2	1611.9	1611.6	1611.2	1610.9	1611.4	1612.7	1614.1	1615.4	1616.8	1616.8
152.5°	1650.8	1651.3	1651.8	1652.2	1652.7	1653.2	1653.8	1654.3	1654.8	1655.4	1656.2
155°	1710.3	1710.3	1710.3	1710.3	1710.3	1710.4	1710.8	1711.1	1711.4	1711.8	1713.1
157.5°	1763.3	1762.6	1761.9	1761.1	1760.4	1760.2	1760.5	1760.9	1761.2	1761.5	1762.9
160°	1794.7	1793.7	1792.7	1791.7	1790.7	1790.4	1790.7	1791.0	1791.4	1791.7	1793.0
162.5°	1822.5	1821.7	1821.0	1820.3	1819.5	1819.2	1819.2	1819.3	1819.4	1819.4	1821.1
165°	1859.6	1858.9	1858.2	1857.6	1856.9	1856.7	1857.1	1857.4	1857.7	1858.1	1859.4
167.5°	1890.9	1889.6	1888.3	1886.9	1885.6	1884.9	1884.9	1884.9	1884.9	1884.9	1886.9
170°	1907.8	1906.5	1905.1	1903.8	1902.5	1901.8	1901.8	1901.8	1901.8	1901.8	1903.8
172.5°	1919.9	1918.6	1917.2	1915.9	1914.5	1913.9	1913.9	1913.9	1913.9	1913.9	1915.9
175°	1933.5	1932.1	1930.8	1929.4	1928.1	1927.4	1927.4	1927.4	1927.4	1927.4	1929.4
177.5°	1940.4	1939.3	1938.3	1937.2	1936.1	1935.4	1935.2	1934.9	1934.6	1934.4	1936.0
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0



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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°	87.1	91.3	95.6	98.4	99.7	101.1	102.5	103.9
90°	97.6	103.1	108.7	112.5	114.7	116.9	119.1	121.3
92.5°	129.7	135.7	141.6	145.6	147.5	149.4	151.3	153.2
95°	183.7	189.8	195.8	199.8	201.6	203.5	205.3	207.2
97.5°	248.1	253.8	259.6	263.3	264.8	266.4	267.9	269.5
100°	292.5	299.1	305.6	309.7	311.4	313.1	314.8	316.5
102.5°	338.6	345.3	352.0	356.3	358.3	360.2	362.2	364.1
105°	413.0	418.4	423.8	427.6	429.8	432.0	434.1	436.3
107.5°	494.5	498.8	503.2	505.8	506.8	507.8	508.8	509.7
110°	550.9	555.1	559.3	561.8	562.7	563.5	564.4	565.2



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CATALOG NUMBER: S125DIW-S610D1560U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	607.4	611.0	614.5	616.6	617.2	617.7	618.3	618.9
115°	694.1	696.8	699.5	701.2	701.9	702.6	703.2	703.9
117.5°	780.6	783.8	786.9	788.4	788.2	788.0	787.8	787.6
120°	839.2	842.0	844.9	846.2	845.9	845.5	845.2	844.9
122.5°	896.3	898.7	901.2	902.4	902.3	902.3	902.2	902.2
125°	980.7	982.8	984.8	986.1	986.6	987.1	987.6	988.1
127.5°	1064.4	1066.5	1068.7	1069.9	1070.2	1070.6	1070.9	1071.2
130°	1120.2	1122.2	1124.2	1125.3	1125.5	1125.7	1125.9	1126.0
132.5°	1173.3	1175.3	1177.3	1178.2	1178.0	1177.8	1177.5	1177.3
135°	1254.7	1256.9	1259.1	1259.9	1259.4	1258.9	1258.5	1258.0
137.5°	1334.7	1337.1	1339.5	1340.2	1339.2	1338.2	1337.2	1336.2
140°	1385.0	1387.6	1390.1	1390.9	1389.9	1388.9	1387.9	1386.9
142.5°	1434.6	1436.6	1438.6	1439.1	1438.1	1437.1	1436.1	1435.1
145°	1506.8	1507.7	1508.5	1508.8	1508.5	1508.1	1507.8	1507.5
147.5°	1574.3	1575.3	1576.4	1576.0	1574.0	1572.0	1570.0	1568.1
150°	1616.8	1616.8	1616.8	1616.5	1616.0	1615.5	1615.0	1614.5
152.5°	1657.0	1657.8	1658.6	1658.4	1657.2	1656.0	1654.9	1653.7
155°	1714.4	1715.8	1717.1	1717.0	1715.3	1713.6	1711.9	1710.3
157.5°	1764.2	1765.6	1766.9	1766.5	1764.2	1762.0	1759.8	1757.6
160°	1794.4	1795.7	1797.1	1796.9	1795.2	1793.5	1791.9	1790.2
162.5°	1822.7	1824.3	1825.9	1825.7	1823.8	1821.8	1819.9	1817.9
165°	1860.7	1862.1	1863.4	1863.1	1861.1	1859.1	1857.1	1855.0
167.5°	1888.9	1890.9	1892.9	1892.9	1890.8	1888.8	1886.7	1884.6
170°	1905.8	1907.8	1909.8	1909.7	1907.3	1905.0	1902.6	1900.3
172.5°	1917.9	1919.9	1921.9	1921.9	1919.8	1917.7	1915.6	1913.6
175°	1931.5	1933.5	1935.5	1935.3	1933.0	1930.6	1928.3	1925.9
177.5°	1937.6	1939.2	1940.8	1940.7	1938.8	1936.9	1935.0	1933.2
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0

(END OF REPORT)