

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: P333658-930

Luminaire Tested: **S125RDIW-S375D1560U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333658-930  
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: S125RDIW-S375D1560U930-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6266.2 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

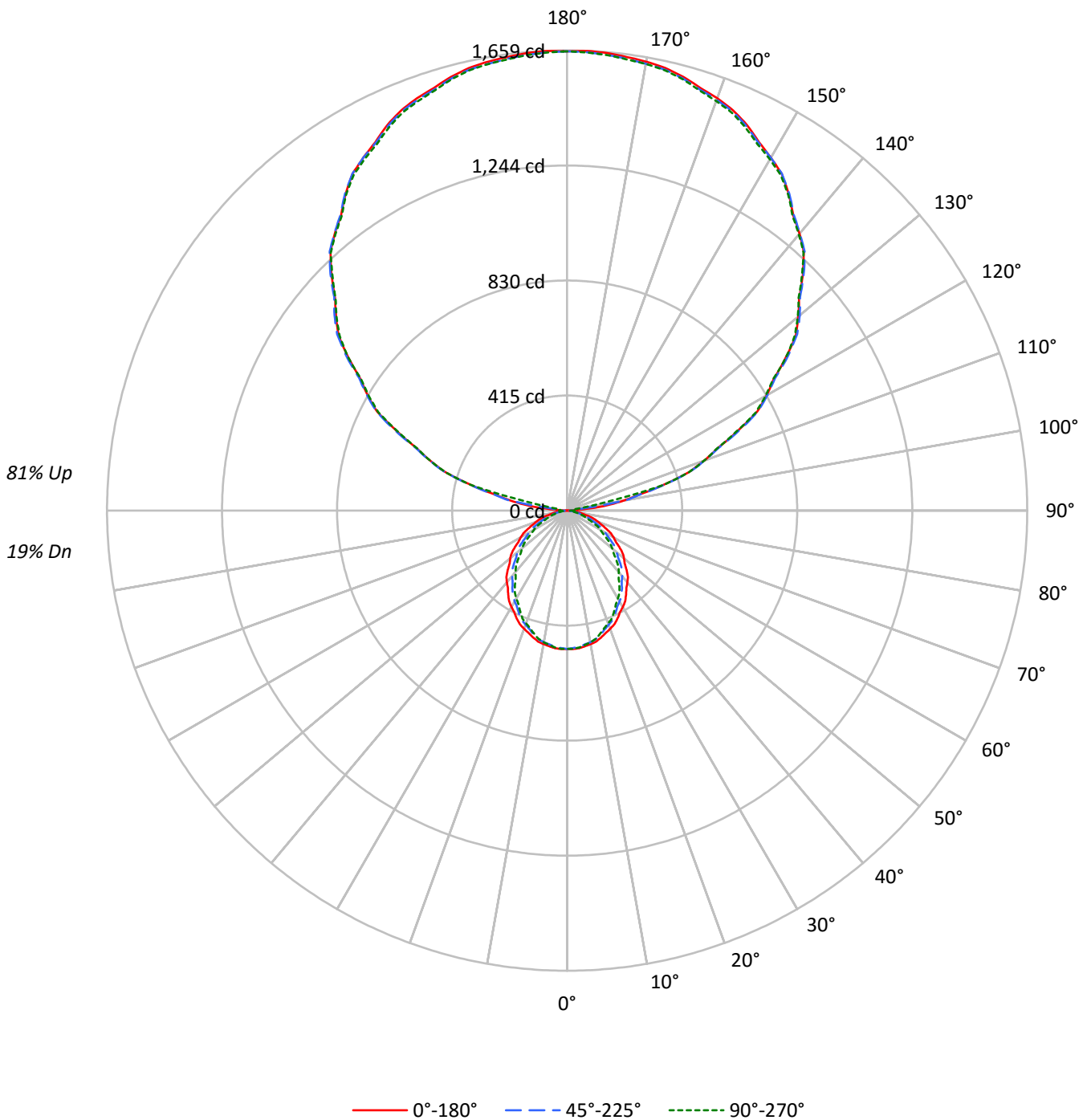
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	24	23
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	67	60	54	66	59	53	49	45	41	38	31	29	27	19	18	17
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	15
5	63	52	45	39	55	46	40	35	35	31	27	25	22	20	15	14	13
6	58	47	39	34	51	41	35	30	32	27	24	23	20	17	14	12	11
7	54	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10
8	49	38	31	26	44	34	27	23	26	21	18	19	16	14	12	10	9
9	46	34	27	23	40	31	25	20	24	19	16	17	14	12	11	9	8
10	43	31	25	20	38	28	22	18	22	17	14	16	13	11	10	8	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	0.7
10°-20°	131.1	2.1
20°-30°	190.1	3.0
30°-40°	216.7	3.5
40°-50°	211.2	3.4
50°-60°	177.8	2.8
60°-70°	124.6	2.0
70°-80°	64.1	1.0
80°-90°	19.6	0.3
90°-100°	60.2	1.0
100°-110°	370.8	5.9
110°-120°	672.5	10.7
120°-130°	863.1	13.8
130°-140°	928.3	14.8
140°-150°	871.4	13.9
150°-160°	704.9	11.2
160°-170°	455.9	7.3
170°-180°	157.2	2.5
0°-30°	368.1	5.9
0°-40°	584.8	9.3
0°-60°	973.7	15.5
0°-90°	1182.0	18.9
90°-120°	1103.5	17.6
90°-150°	3766.2	60.1
90°-180°	5084.0	81.1
0°-180°	6266.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	1	11	20	26	29	4
95°	70	64	20	25	26	89
105°	361	365	366	366	364	383
115°	678	683	685	680	672	671
125°	963	972	972	967	963	860
135°	1202	1208	1206	1204	1197	926
145°	1393	1395	1396	1396	1389	871
155°	1534	1527	1529	1532	1523	707
165°	1619	1612	1613	1619	1610	457
175°	1656	1649	1650	1658	1648	158
180°	1656	1656	1656	1656	1656	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.2	7.2	7.1	7.1	7.0	7.2	7.5	7.8	8.2	8.5	8.7
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.8	17.7	19.6	21.0
92.5°	18.9	17.4	15.8	14.3	12.8	12.9	14.6	16.2	17.9	19.6	21.0
95°	70.0	69.1	68.3	67.5	66.7	61.1	50.7	40.4	30.0	19.6	21.0
97.5°	146.0	147.5	149.0	150.5	152.0	142.4	121.9	101.4	80.9	60.4	52.7
100°	205.0	205.8	206.6	207.4	208.2	209.2	210.3	211.4	212.5	213.5	172.9
102.5°	264.9	265.9	266.9	268.0	269.0	269.9	270.5	271.2	271.8	272.5	264.8
105°	360.9	361.9	363.1	364.1	365.2	365.7	365.7	365.7	365.7	365.7	365.7
107.5°	460.5	460.5	460.5	460.5	460.5	460.7	461.3	461.9	462.4	462.9	463.0
110°	525.3	525.3	525.3	525.3	525.3	525.5	526.1	526.7	527.2	527.7	526.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	586.2	586.9	587.5	588.2	588.8	589.3	589.6	590.0	590.3	590.6	589.5
115°	677.5	678.8	680.2	681.6	682.9	683.7	684.0	684.3	684.6	684.9	683.7
117.5°	772.0	771.9	771.8	771.8	771.8	772.3	773.3	774.3	775.3	776.4	774.9
120°	830.9	830.6	830.4	830.1	829.8	830.1	830.9	831.7	832.5	833.3	832.8
122.5°	883.0	883.9	885.0	886.1	887.0	887.8	888.2	888.5	888.9	889.3	888.8
125°	963.4	965.3	967.3	969.1	971.1	972.0	972.0	972.0	972.0	972.0	970.9
127.5°	1040.2	1041.6	1043.0	1044.4	1045.7	1046.4	1046.2	1046.0	1045.9	1045.7	1045.1
130°	1087.4	1088.8	1090.1	1091.5	1092.8	1093.6	1094.0	1094.2	1094.5	1094.8	1094.0
132.5°	1134.5	1136.1	1137.7	1139.3	1140.8	1141.3	1140.8	1140.1	1139.5	1139.0	1138.8
135°	1201.5	1203.1	1204.8	1206.5	1208.1	1208.6	1208.1	1207.5	1207.0	1206.5	1205.9
137.5°	1263.1	1264.5	1266.0	1267.4	1268.9	1269.3	1268.8	1268.3	1267.8	1267.3	1267.5
140°	1303.4	1304.0	1304.5	1305.0	1305.6	1305.7	1305.5	1305.2	1304.9	1304.6	1305.2
142.5°	1339.7	1340.0	1340.4	1340.7	1341.0	1341.4	1341.8	1342.1	1342.6	1343.0	1343.0
145°	1393.0	1393.5	1394.1	1394.7	1395.2	1395.5	1395.5	1395.5	1395.5	1395.5	1395.7
147.5°	1439.7	1439.5	1439.4	1439.3	1439.2	1439.3	1439.7	1440.0	1440.3	1440.6	1441.0
150°	1469.1	1468.5	1468.0	1467.5	1466.9	1466.9	1467.5	1468.0	1468.5	1469.1	1469.7
152.5°	1497.5	1496.4	1495.2	1494.0	1492.7	1492.4	1493.0	1493.5	1494.1	1494.6	1495.2
155°	1534.1	1532.5	1530.9	1529.3	1527.6	1527.1	1527.6	1528.1	1528.7	1529.3	1530.1
157.5°	1562.4	1561.4	1560.4	1559.4	1558.4	1558.0	1558.0	1558.1	1558.1	1558.2	1559.1
160°	1582.0	1580.4	1578.7	1577.1	1575.5	1574.8	1575.1	1575.3	1575.6	1575.9	1577.0
162.5°	1597.7	1596.1	1594.5	1592.8	1591.1	1590.5	1590.7	1591.1	1591.3	1591.5	1593.1
165°	1618.9	1617.2	1615.5	1613.9	1612.3	1611.6	1611.8	1612.2	1612.4	1612.7	1614.3
167.5°	1634.5	1632.9	1631.2	1629.5	1627.7	1627.1	1627.3	1627.6	1627.9	1628.2	1630.1
170°	1643.4	1641.4	1639.6	1637.6	1635.7	1634.9	1635.2	1635.5	1635.7	1636.0	1638.2
172.5°	1649.3	1647.4	1645.4	1643.6	1641.6	1641.0	1641.4	1641.9	1642.4	1642.9	1644.9
175°	1655.6	1654.0	1652.4	1650.7	1649.1	1648.5	1648.7	1648.9	1649.3	1649.5	1651.7
177.5°	1658.6	1657.3	1656.0	1654.6	1653.3	1652.8	1653.0	1653.3	1653.4	1653.7	1655.2
180°	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	9.0	9.3	9.5	9.7	9.8	9.9	10.0	10.1
90°	22.3	23.7	25.1	26.2	27.0	27.8	28.6	29.4
92.5°	22.3	23.7	25.1	25.9	26.3	26.7	27.1	27.5
95°	22.3	23.7	25.1	25.8	25.8	25.8	25.8	25.8
97.5°	45.0	37.3	29.6	25.8	25.8	25.8	25.8	25.8
100°	132.2	91.6	51.0	30.2	29.0	28.0	26.9	25.8
102.5°	257.1	249.4	241.7	228.6	210.0	191.5	172.9	154.4
105°	365.7	365.7	365.7	365.6	365.3	365.1	364.8	364.5
107.5°	463.1	463.1	463.2	462.8	461.9	461.1	460.3	459.5
110°	526.1	525.3	524.5	524.2	524.5	524.7	525.1	525.3





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CATALOG NUMBER: S125RDIW-S375D1560U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	588.5	587.5	586.4	585.7	585.4	585.0	584.6	584.2
115°	682.7	681.6	680.4	679.1	677.5	675.8	674.2	672.5
117.5°	773.6	772.2	770.7	769.6	769.0	768.3	767.5	766.8
120°	832.3	831.7	831.2	830.2	828.8	827.4	826.1	824.8
122.5°	888.2	887.7	887.1	886.1	884.5	882.9	881.3	879.7
125°	969.9	968.7	967.7	966.7	965.9	965.1	964.3	963.4
127.5°	1044.5	1043.9	1043.3	1042.0	1039.9	1038.0	1035.9	1033.9
130°	1093.2	1092.3	1091.5	1090.4	1089.1	1087.7	1086.3	1084.9
132.5°	1138.6	1138.5	1138.3	1137.5	1136.2	1134.8	1133.4	1132.0
135°	1205.3	1204.8	1204.3	1203.1	1201.5	1199.9	1198.2	1196.6
137.5°	1267.5	1267.6	1267.8	1267.1	1265.7	1264.3	1262.8	1261.4
140°	1305.7	1306.3	1306.8	1306.3	1304.6	1303.0	1301.4	1299.8
142.5°	1343.1	1343.3	1343.4	1342.6	1340.9	1339.3	1337.7	1336.0
145°	1396.0	1396.3	1396.5	1395.9	1394.2	1392.6	1391.0	1389.4
147.5°	1441.3	1441.6	1441.9	1441.1	1439.2	1437.2	1435.3	1433.3
150°	1470.1	1470.7	1471.3	1470.5	1468.3	1466.1	1464.0	1461.8
152.5°	1495.7	1496.2	1496.8	1496.1	1494.1	1492.2	1490.2	1488.2
155°	1530.9	1531.7	1532.5	1531.8	1529.7	1527.5	1525.3	1523.1
157.5°	1559.9	1560.8	1561.7	1561.1	1558.9	1556.7	1554.4	1552.3
160°	1578.0	1579.2	1580.2	1579.7	1577.5	1575.3	1573.1	1571.0
162.5°	1594.6	1596.2	1597.7	1597.3	1594.9	1592.4	1590.1	1587.6
165°	1615.9	1617.6	1619.3	1618.9	1616.8	1614.6	1612.4	1610.2
167.5°	1632.1	1634.0	1636.0	1635.7	1633.3	1630.8	1628.4	1626.0
170°	1640.4	1642.6	1644.7	1644.6	1642.2	1639.7	1637.2	1634.8
172.5°	1646.8	1648.8	1650.7	1650.5	1648.0	1645.6	1643.2	1640.7
175°	1653.8	1656.0	1658.2	1658.1	1655.6	1653.2	1650.7	1648.3
177.5°	1656.8	1658.2	1659.8	1659.7	1657.9	1656.2	1654.4	1652.7
180°	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6

(END OF REPORT)