

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: P333659-840

Luminaire Tested: **S125RDIW-S375D1560U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333659-840  
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: S125RDIW-S375D1560U840-4F0-1E-UDD-F1  
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, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6925.3 lumens  
Efficiency: N/A  
Efficacy: 129.7 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

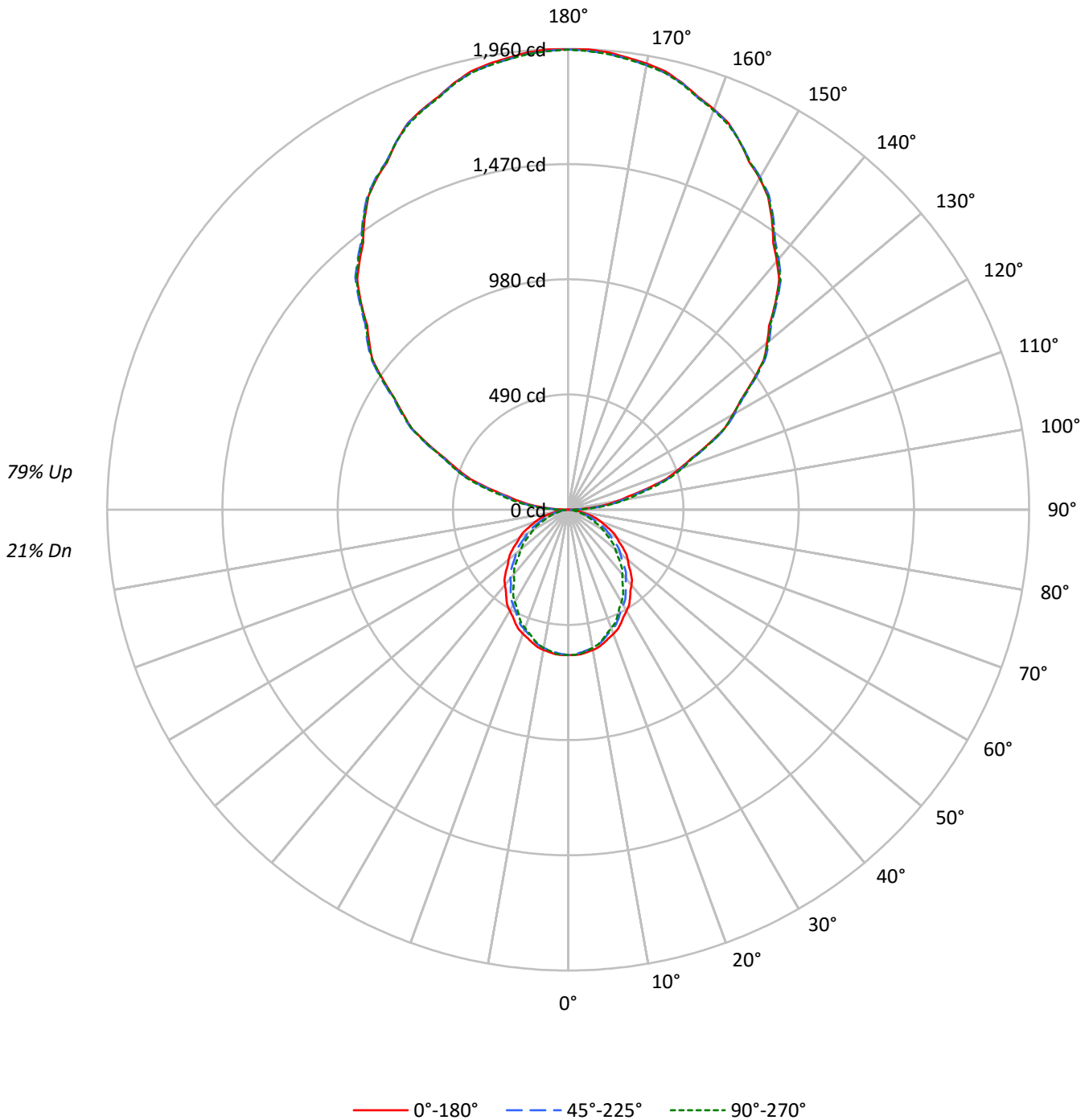
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18
2	83	76	70	66	73	68	63	59	52	48	46	37	35	33	23	22	21	15
3	76	67	60	55	67	60	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	52	46	61	53	46	42	40	36	33	29	26	24	18	17	16	11
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14	10
6	58	47	39	34	52	42	35	31	32	28	24	23	20	18	15	13	12	9
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	19	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

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

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	0.8
10°-20°	162.4	2.3
20°-30°	235.5	3.4
30°-40°	268.4	3.9
40°-50°	261.6	3.8
50°-60°	220.2	3.2
60°-70°	154.3	2.2
70°-80°	79.3	1.1
80°-90°	24.3	0.4
90°-100°	131.1	1.9
100°-110°	387.1	5.6
110°-120°	655.6	9.5
120°-130°	862.9	12.5
130°-140°	966.8	14.0
140°-150°	947.6	13.7
150°-160°	795.9	11.5
160°-170°	529.1	7.6
170°-180°	185.2	2.7
0°-30°	456.0	6.6
0°-40°	724.3	10.5
0°-60°	1206.1	17.4
0°-90°	1464.1	21.1
90°-120°	1173.8	16.9
90°-150°	3951.1	57.1
90°-180°	5461.0	78.9
0°-180°	6925.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	2	14	24	32	37	7
95°	99	103	117	128	131	106
105°	347	355	364	373	378	371
115°	656	662	666	664	663	649
125°	958	967	969	966	964	858
135°	1246	1255	1256	1256	1250	960
145°	1509	1515	1520	1520	1515	943
155°	1727	1727	1729	1734	1727	795
165°	1878	1875	1876	1882	1873	530
175°	1953	1947	1946	1954	1945	185
180°	1957	1957	1957	1957	1957	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.9	8.9	8.8	8.8	8.7	8.9	9.3	9.7	10.1	10.5	10.8
90°	1.5	4.2	7.0	9.7	12.3	14.8	17.3	19.6	22.0	24.3	26.1
92.5°	36.9	38.8	40.7	42.5	44.4	46.9	49.8	52.6	55.5	58.5	60.7
95°	99.0	99.7	100.4	101.0	101.7	103.7	107.1	110.5	113.9	117.2	119.7
97.5°	164.5	164.7	165.0	165.3	165.6	168.0	172.7	177.4	182.1	186.7	188.9
100°	213.2	213.2	213.2	213.2	213.2	215.4	219.8	224.2	228.6	233.0	236.1
102.5°	265.6	267.0	268.3	269.6	271.0	272.9	275.1	277.3	279.5	281.8	285.1
105°	347.3	348.9	350.6	352.3	354.1	355.9	357.9	359.9	361.9	364.1	366.1
107.5°	437.4	439.1	440.8	442.5	444.1	445.9	447.4	448.9	450.5	452.0	453.0
110°	499.6	501.3	502.9	504.6	506.3	507.7	508.7	509.7	510.7	511.7	512.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	562.9	563.8	564.7	565.5	566.4	567.5	568.8	570.1	571.4	572.7	573.1
115°	656.4	657.8	659.1	660.5	661.9	662.9	663.6	664.2	664.9	665.6	665.2
117.5°	750.2	750.8	751.4	752.0	752.7	753.3	753.9	754.5	755.1	755.8	756.0
120°	808.7	810.4	812.1	813.9	815.5	816.5	816.9	817.2	817.5	817.9	817.9
122.5°	872.1	872.7	873.3	873.9	874.5	875.3	876.2	877.1	877.9	878.8	878.5
125°	958.0	960.0	962.1	964.1	966.1	967.3	967.7	968.0	968.4	968.7	968.0
127.5°	1049.4	1050.6	1051.7	1052.8	1054.0	1054.8	1055.2	1055.6	1056.0	1056.4	1056.0
130°	1104.2	1105.9	1107.6	1109.2	1111.0	1112.2	1112.9	1113.5	1114.2	1114.9	1114.5
132.5°	1159.0	1161.8	1164.6	1167.4	1170.1	1171.4	1171.3	1171.1	1171.0	1170.9	1170.5
135°	1245.9	1247.9	1249.9	1251.9	1253.9	1255.2	1255.5	1255.9	1256.2	1256.5	1256.5
137.5°	1327.5	1329.5	1331.4	1333.3	1335.3	1336.7	1337.5	1338.2	1338.9	1339.7	1340.1
140°	1379.9	1381.6	1383.2	1384.9	1386.6	1388.0	1389.0	1390.1	1391.1	1392.1	1392.7
142.5°	1432.3	1433.7	1435.1	1436.5	1437.9	1439.3	1440.6	1441.9	1443.2	1444.4	1444.8
145°	1509.3	1510.7	1512.1	1513.4	1514.8	1515.9	1516.9	1517.9	1518.9	1519.9	1519.9
147.5°	1580.6	1581.3	1582.1	1582.9	1583.6	1584.4	1585.2	1586.0	1586.8	1587.6	1588.4
150°	1628.1	1627.8	1627.5	1627.1	1626.8	1627.3	1628.6	1630.0	1631.3	1632.7	1632.7
152.5°	1667.1	1667.6	1668.1	1668.5	1669.0	1669.5	1670.1	1670.6	1671.1	1671.7	1672.5
155°	1727.2	1727.2	1727.2	1727.2	1727.2	1727.3	1727.7	1728.0	1728.3	1728.7	1730.0
157.5°	1780.7	1780.0	1779.3	1778.5	1777.8	1777.6	1777.9	1778.3	1778.6	1778.9	1780.3
160°	1812.4	1811.4	1810.4	1809.4	1808.4	1808.1	1808.4	1808.7	1809.1	1809.4	1810.7
162.5°	1840.5	1839.7	1839.0	1838.3	1837.4	1837.1	1837.1	1837.2	1837.3	1837.3	1839.1
165°	1877.9	1877.2	1876.5	1875.9	1875.2	1875.0	1875.4	1875.7	1876.0	1876.4	1877.7
167.5°	1909.6	1908.2	1906.9	1905.5	1904.2	1903.5	1903.5	1903.5	1903.5	1903.5	1905.5
170°	1926.6	1925.3	1923.9	1922.6	1921.3	1920.6	1920.6	1920.6	1920.6	1920.6	1922.6
172.5°	1938.8	1937.5	1936.1	1934.8	1933.4	1932.8	1932.8	1932.8	1932.8	1932.8	1934.8
175°	1952.6	1951.2	1949.8	1948.4	1947.1	1946.4	1946.4	1946.4	1946.4	1946.4	1948.4
177.5°	1959.5	1958.4	1957.4	1956.3	1955.2	1954.5	1954.3	1954.0	1953.7	1953.5	1955.1
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	11.1	11.5	11.8	12.0	12.2	12.3	12.4	12.5
90°	27.8	29.5	31.1	32.5	33.5	34.5	35.5	36.6
92.5°	62.9	65.1	67.5	68.9	69.7	70.4	71.1	71.9
95°	122.0	124.4	126.7	128.3	129.0	129.7	130.3	131.0
97.5°	191.2	193.4	195.6	197.0	197.4	197.8	198.2	198.6
100°	239.1	242.2	245.2	247.1	247.7	248.4	249.1	249.7
102.5°	288.4	291.8	295.0	297.2	298.1	299.0	300.0	300.9
105°	368.1	370.1	372.1	373.7	374.7	375.7	376.7	377.7
107.5°	454.0	455.0	456.1	456.6	456.5	456.5	456.4	456.3
110°	513.8	514.8	515.8	516.1	515.8	515.4	515.1	514.8





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CATALOG NUMBER: S125RDIW-S375D1560U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	573.6	574.1	574.5	574.5	573.9	573.3	572.7	572.1
115°	664.9	664.6	664.2	663.9	663.6	663.2	662.9	662.6
117.5°	756.3	756.6	756.8	756.3	754.9	753.6	752.2	750.8
120°	817.9	817.9	817.9	817.2	815.9	814.5	813.1	811.8
122.5°	878.3	878.0	877.7	877.1	876.0	874.8	873.7	872.7
125°	967.3	966.6	965.9	965.4	965.1	964.7	964.4	964.1
127.5°	1055.7	1055.4	1055.0	1054.5	1053.8	1053.2	1052.5	1051.8
130°	1114.2	1113.9	1113.5	1113.0	1112.4	1111.7	1111.0	1110.3
132.5°	1170.2	1169.9	1169.5	1168.9	1168.0	1167.0	1166.1	1165.1
135°	1256.5	1256.5	1256.5	1255.9	1254.5	1253.1	1251.7	1250.4
137.5°	1340.5	1340.9	1341.3	1340.7	1339.0	1337.3	1335.5	1333.8
140°	1393.4	1394.1	1394.7	1394.2	1392.6	1390.9	1389.2	1387.5
142.5°	1445.2	1445.6	1446.1	1445.4	1443.7	1442.1	1440.4	1438.7
145°	1519.9	1519.9	1519.9	1519.4	1518.4	1517.4	1516.4	1515.4
147.5°	1589.2	1590.0	1590.8	1590.1	1587.8	1585.5	1583.3	1580.9
150°	1632.7	1632.7	1632.7	1632.3	1631.6	1631.0	1630.3	1629.6
152.5°	1673.3	1674.2	1675.0	1674.8	1673.5	1672.3	1671.1	1669.9
155°	1731.3	1732.7	1734.0	1733.9	1732.2	1730.5	1728.8	1727.2
157.5°	1781.6	1783.0	1784.3	1783.9	1781.6	1779.4	1777.2	1774.9
160°	1812.1	1813.4	1814.8	1814.6	1812.9	1811.2	1809.6	1807.9
162.5°	1840.7	1842.3	1843.9	1843.7	1841.8	1839.8	1837.9	1835.8
165°	1879.1	1880.5	1881.8	1881.5	1879.5	1877.4	1875.4	1873.3
167.5°	1907.5	1909.6	1911.6	1911.6	1909.5	1907.4	1905.3	1903.2
170°	1924.6	1926.6	1928.6	1928.5	1926.1	1923.8	1921.4	1919.0
172.5°	1936.8	1938.8	1940.9	1940.9	1938.7	1936.6	1934.5	1932.5
175°	1950.6	1952.6	1954.6	1954.4	1952.1	1949.6	1947.3	1944.9
177.5°	1956.7	1958.3	1959.9	1959.8	1957.9	1956.0	1954.1	1952.3
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1

(END OF REPORT)