

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: P333361

Luminaire Tested: **S125DIW-S375D1340U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333361  
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-S375D1340U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

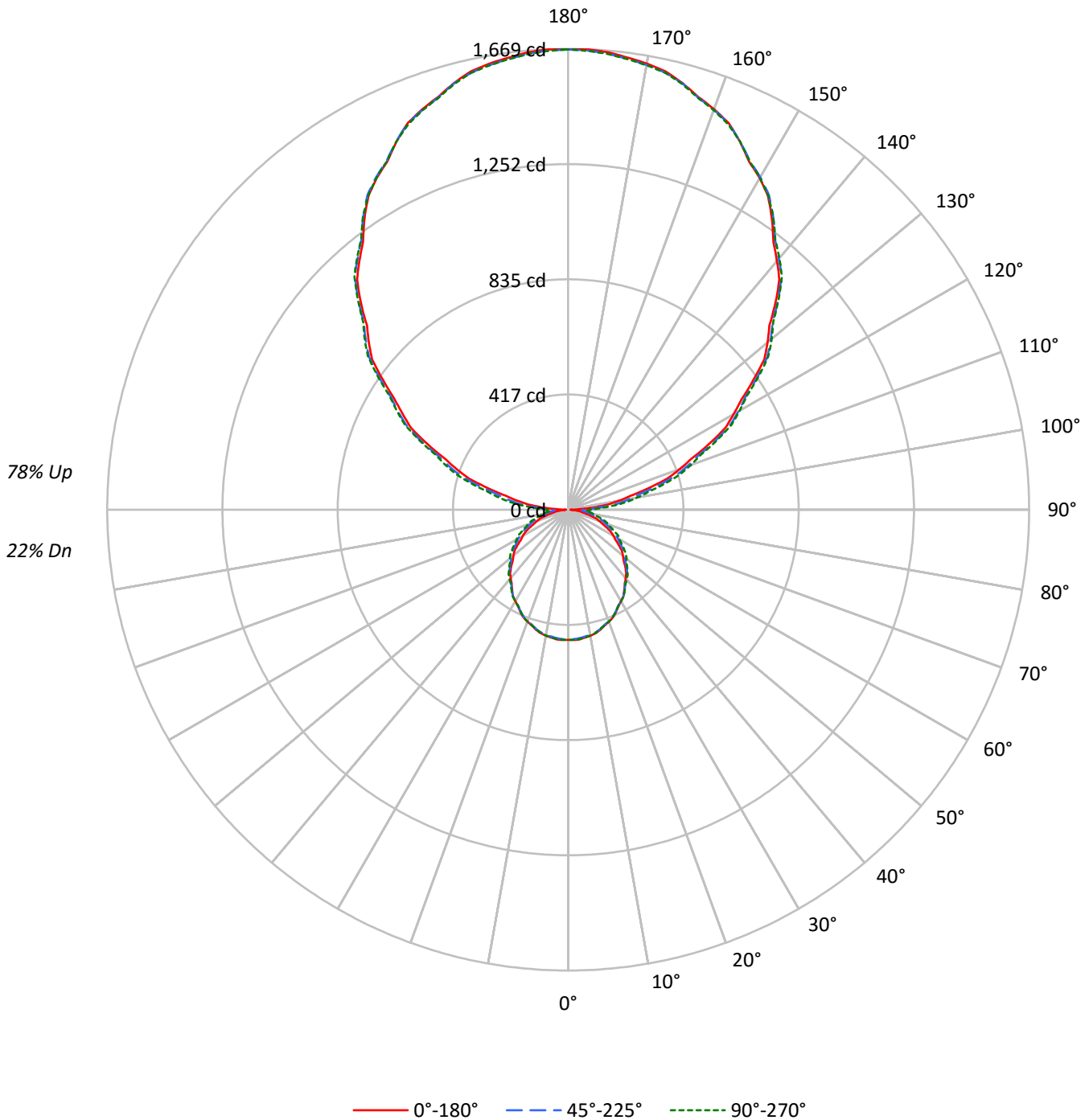
Lumens per Lamp: N/A  
Luminaire Lumens: 6115.0 lumens  
Efficiency: N/A  
Efficacy: 131.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 46.6  
Input Voltage (V): 120  
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	22
1	91	87	83	80	81	77	74	71	59	57	55	42	41	40	27	26	25	18
2	83	76	70	65	73	67	62	58	51	48	45	37	35	33	23	22	21	15
3	75	66	59	54	67	59	53	48	45	41	38	32	30	28	20	19	18	13
4	69	58	51	45	61	52	46	41	40	35	32	29	26	23	18	17	15	11
5	63	52	44	38	56	46	40	35	36	31	27	26	23	20	16	15	13	9
6	58	46	39	33	51	41	35	30	32	27	24	23	20	17	15	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	12	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	41	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	9	7	5

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

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	0.7
10°-20°	126.5	2.1
20°-30°	188.2	3.1
30°-40°	222.9	3.6
40°-50°	230.5	3.8
50°-60°	212.3	3.5
60°-70°	171.6	2.8
70°-80°	114.9	1.9
80°-90°	63.2	1.0
90°-100°	145.1	2.4
100°-110°	354.3	5.8
110°-120°	574.9	9.4
120°-130°	744.3	12.2
130°-140°	827.6	13.5
140°-150°	807.9	13.2
150°-160°	677.9	11.1
160°-170°	450.6	7.4
170°-180°	157.7	2.6
0°-30°	359.3	5.9
0°-40°	582.2	9.5
0°-60°	1025.0	16.8
0°-90°	1374.8	22.5
90°-120°	1074.4	17.6
90°-150°	3454.1	56.5
90°-180°	4740.0	77.5
0°-180°	6115.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	9	34	59	75	83	10
95°	90	106	134	152	159	95
105°	300	314	335	352	360	320
115°	562	571	585	592	593	556
125°	818	825	836	840	841	732
135°	1062	1069	1074	1079	1077	818
145°	1286	1291	1295	1297	1295	803
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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.7	18.4	22.2	25.9	29.7	33.5	37.4	41.3	45.2	49.1	51.7
90°	8.7	14.3	19.9	25.5	31.1	36.6	42.1	47.6	53.1	58.7	62.5
92.5°	38.0	42.7	47.4	52.0	56.7	62.0	68.1	74.1	80.2	86.2	90.4
95°	90.3	93.6	96.8	100.1	103.3	108.1	114.5	120.9	127.2	133.6	137.9
97.5°	145.5	148.2	150.8	153.4	156.1	161.1	168.4	175.8	183.1	190.5	194.5
100°	186.7	188.8	191.0	193.2	195.3	199.9	206.9	214.0	221.0	228.0	232.8
102.5°	230.9	234.1	237.2	240.4	243.5	247.6	252.8	257.9	263.0	268.1	273.0
105°	299.9	303.0	306.1	309.2	312.3	316.2	321.0	325.8	330.6	335.4	339.2
107.5°	376.2	379.0	381.8	384.7	387.5	391.1	395.3	399.6	403.9	408.2	411.1
110°	428.7	431.4	434.1	436.7	439.4	442.6	446.3	450.1	453.8	457.6	460.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	482.7	484.4	486.1	487.9	489.6	492.4	496.3	500.2	504.1	508.0	510.2
115°	561.9	563.7	565.6	567.5	569.3	571.9	575.1	578.4	581.6	584.9	586.4
117.5°	641.3	642.3	643.3	644.3	645.3	647.3	650.3	653.4	656.4	659.5	661.4
120°	691.1	692.9	694.6	696.4	698.1	700.3	703.0	705.6	708.3	710.9	712.6
122.5°	744.7	745.4	746.0	746.7	747.3	749.2	752.2	755.3	758.3	761.3	762.7
125°	817.8	819.4	821.0	822.6	824.3	826.3	828.6	830.9	833.3	835.6	836.7
127.5°	895.1	896.0	896.9	897.8	898.6	900.1	902.1	904.2	906.2	908.2	909.4
130°	941.8	943.2	944.5	945.8	947.2	948.9	950.9	952.9	954.9	956.9	958.1
132.5°	988.2	990.5	992.8	995.2	997.5	999.2	1000.2	1001.2	1002.2	1003.2	1004.3
135°	1062.0	1063.6	1065.3	1066.9	1068.5	1069.8	1070.8	1071.8	1072.8	1073.9	1075.2
137.5°	1131.4	1133.0	1134.6	1136.2	1137.8	1139.1	1140.1	1141.1	1142.0	1143.0	1144.6
140°	1175.7	1177.1	1178.6	1180.0	1181.5	1182.7	1183.6	1184.6	1185.6	1186.5	1188.2
142.5°	1220.3	1221.4	1222.6	1223.7	1224.8	1226.0	1227.1	1228.2	1229.3	1230.4	1231.7
145°	1286.0	1287.0	1288.1	1289.1	1290.2	1291.1	1292.0	1292.8	1293.7	1294.6	1295.1
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1353.0
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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	54.4	57.0	59.7	61.4	62.3	63.2	64.1	65.0
90°	66.3	70.1	73.9	76.6	78.1	79.7	81.3	82.9
92.5°	94.6	98.8	103.0	105.7	107.1	108.4	109.8	111.1
95°	142.2	146.5	150.7	153.5	154.8	156.1	157.4	158.7
97.5°	198.6	202.6	206.7	209.2	210.3	211.3	212.4	213.4
100°	237.5	242.3	247.0	250.0	251.2	252.4	253.6	254.8
102.5°	277.9	282.8	287.7	290.8	292.3	293.7	295.1	296.5
105°	343.0	346.8	350.6	353.3	354.8	356.4	358.0	359.6
107.5°	414.0	416.9	419.8	421.5	422.1	422.7	423.3	423.8
110°	463.2	466.0	468.8	470.5	470.9	471.3	471.7	472.2





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CATALOG NUMBER: S125DIW-S375D1340U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	512.5	514.8	517.1	518.3	518.5	518.7	518.9	519.1
115°	588.0	589.6	591.1	592.1	592.4	592.7	593.1	593.4
117.5°	663.4	665.4	667.4	668.1	667.7	667.2	666.8	666.3
120°	714.4	716.1	717.9	718.5	718.0	717.4	716.9	716.3
122.5°	764.2	765.6	767.0	767.6	767.3	767.0	766.7	766.4
125°	837.8	838.8	839.9	840.5	840.8	841.0	841.2	841.4
127.5°	910.7	911.9	913.1	913.8	913.8	913.8	913.8	913.8
130°	959.2	960.4	961.5	962.1	962.0	961.9	961.9	961.8
132.5°	1005.5	1006.6	1007.8	1008.2	1007.8	1007.4	1007.0	1006.7
135°	1076.5	1077.9	1079.2	1079.5	1078.9	1078.3	1077.6	1077.0
137.5°	1146.1	1147.7	1149.2	1149.5	1148.5	1147.5	1146.4	1145.4
140°	1189.9	1191.7	1193.4	1193.7	1192.7	1191.6	1190.6	1189.6
142.5°	1233.0	1234.3	1235.7	1235.8	1234.8	1233.7	1232.7	1231.7
145°	1295.6	1296.1	1296.6	1296.7	1296.2	1295.7	1295.3	1294.8
147.5°	1353.9	1354.7	1355.6	1355.1	1353.4	1351.6	1349.8	1348.0
150°	1390.6	1390.6	1390.6	1390.3	1389.8	1389.4	1388.9	1388.4
152.5°	1425.1	1425.8	1426.5	1426.4	1425.4	1424.3	1423.3	1422.3
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)