

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: P333367-940

Luminaire Tested: **S125DIW-S375D1560U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333367-940  
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-S375D1560U940-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 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: 6128.0 lumens  
Efficiency: N/A  
Efficacy: 114.8 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

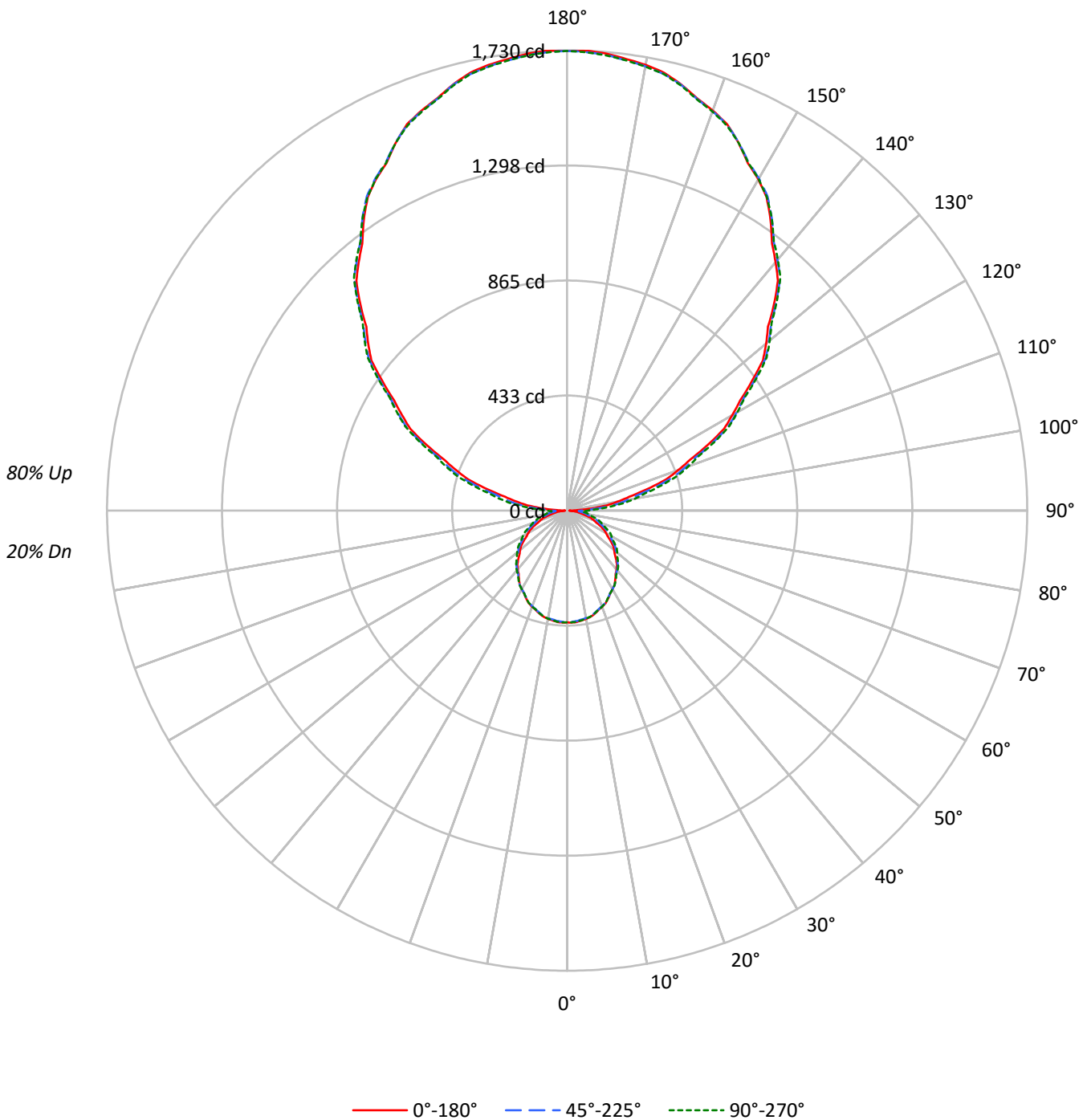
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	67	67	67	47	47	47	29	29	29
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7

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

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.7	0.6
10°-20°	112.8	1.8
20°-30°	167.8	2.7
30°-40°	198.8	3.2
40°-50°	205.5	3.4
50°-60°	189.3	3.1
60°-70°	153.0	2.5
70°-80°	102.5	1.7
80°-90°	56.9	0.9
90°-100°	145.6	2.4
100°-110°	363.8	5.9
110°-120°	593.7	9.7
120°-130°	770.3	12.6
130°-140°	857.4	14.0
140°-150°	837.5	13.7
150°-160°	702.8	11.5
160°-170°	467.2	7.6
170°-180°	163.5	2.7
0°-30°	320.4	5.2
0°-40°	519.2	8.5
0°-60°	914.0	14.9
0°-90°	1226.4	20.0
90°-120°	1103.0	18.0
90°-150°	3568.1	58.2
90°-180°	4902.0	80.0
0°-180°	6128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	32	55	71	78	9
95°	93	107	134	151	158	97
105°	310	324	344	360	367	331
115°	582	591	604	610	611	576
125°	848	855	865	869	869	759
135°	1101	1108	1113	1118	1115	848
145°	1333	1338	1342	1344	1342	833
155°	1525	1525	1526	1531	1525	702
165°	1658	1656	1657	1661	1654	468
175°	1724	1719	1719	1726	1717	164
180°	1728	1728	1728	1728	1728	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.1	16.5	20.0	23.4	26.8	30.2	33.8	37.3	40.8	44.3	46.7
90°	7.9	13.3	18.5	23.9	29.2	34.5	39.7	44.9	50.1	55.3	58.9
92.5°	38.5	42.9	47.3	51.6	56.0	61.1	66.9	72.6	78.4	84.1	88.1
95°	92.7	95.8	98.7	101.7	104.7	109.2	115.3	121.5	127.5	133.7	137.8
97.5°	150.1	152.5	154.9	157.2	159.6	164.4	171.5	178.6	185.7	192.9	196.8
100°	192.8	194.7	196.6	198.6	200.5	204.9	211.7	218.5	225.3	232.1	236.7
102.5°	238.7	241.7	244.7	247.6	250.7	254.5	259.4	264.2	269.0	273.8	278.7
105°	310.3	313.3	316.3	319.2	322.2	325.9	330.5	335.0	339.6	344.1	347.7
107.5°	389.4	392.2	394.9	397.7	400.4	403.8	407.8	411.8	415.8	419.8	422.6
110°	444.0	446.6	449.2	451.7	454.3	457.4	460.8	464.3	467.8	471.3	473.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	500.0	501.6	503.3	504.9	506.6	509.2	512.8	516.5	520.0	523.7	525.8
115°	582.1	584.0	585.8	587.6	589.4	591.8	594.9	597.8	600.8	603.8	605.1
117.5°	664.5	665.5	666.5	667.4	668.3	670.2	673.1	675.8	678.6	681.4	683.2
120°	716.1	717.9	719.7	721.5	723.3	725.3	727.7	730.1	732.5	734.9	736.6
122.5°	771.8	772.5	773.1	773.8	774.5	776.2	779.0	781.9	784.6	787.5	788.7
125°	847.6	849.3	851.0	852.7	854.3	856.3	858.4	860.5	862.6	864.8	865.7
127.5°	927.8	928.7	929.7	930.6	931.6	932.9	934.8	936.7	938.5	940.4	941.5
130°	976.2	977.7	979.1	980.4	981.9	983.5	985.3	987.3	989.2	991.0	992.0
132.5°	1024.3	1026.8	1029.2	1031.6	1034.0	1035.7	1036.6	1037.4	1038.3	1039.2	1040.2
135°	1100.9	1102.6	1104.3	1106.0	1107.7	1109.0	1110.0	1110.9	1111.9	1112.8	1114.0
137.5°	1172.9	1174.6	1176.3	1177.9	1179.6	1180.9	1181.9	1182.8	1183.7	1184.7	1186.2
140°	1218.9	1220.3	1221.8	1223.3	1224.9	1226.1	1227.1	1228.1	1229.0	1230.0	1231.6
142.5°	1265.1	1266.3	1267.5	1268.6	1269.8	1271.0	1272.1	1273.3	1274.4	1275.6	1276.8
145°	1333.2	1334.3	1335.3	1336.5	1337.6	1338.5	1339.4	1340.3	1341.2	1342.1	1342.6
147.5°	1395.7	1396.3	1397.0	1397.7	1398.3	1399.0	1399.7	1400.4	1401.1	1401.9	1402.8
150°	1437.6	1437.3	1437.1	1436.7	1436.5	1436.9	1438.1	1439.3	1440.5	1441.7	1441.7
152.5°	1472.0	1472.5	1472.9	1473.3	1473.7	1474.2	1474.7	1475.2	1475.6	1476.1	1476.9
155°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.2	1525.5	1525.8	1526.1	1526.4	1527.6
157.5°	1572.4	1571.7	1571.1	1570.4	1569.8	1569.6	1569.9	1570.2	1570.5	1570.7	1572.0
160°	1600.4	1599.5	1598.6	1597.7	1596.8	1596.5	1596.8	1597.1	1597.4	1597.7	1598.8
162.5°	1625.1	1624.4	1623.8	1623.2	1622.5	1622.2	1622.2	1622.3	1622.4	1622.4	1623.9
165°	1658.2	1657.6	1657.0	1656.4	1655.8	1655.6	1656.0	1656.3	1656.5	1656.9	1658.0
167.5°	1686.1	1685.0	1683.8	1682.6	1681.4	1680.8	1680.8	1680.8	1680.8	1680.8	1682.6
170°	1701.2	1700.0	1698.8	1697.6	1696.5	1695.9	1695.9	1695.9	1695.9	1695.9	1697.6
172.5°	1712.0	1710.8	1709.6	1708.4	1707.2	1706.6	1706.6	1706.6	1706.6	1706.6	1708.4
175°	1724.1	1722.9	1721.7	1720.5	1719.3	1718.7	1718.7	1718.7	1718.7	1718.7	1720.5
177.5°	1730.3	1729.3	1728.4	1727.4	1726.4	1725.8	1725.6	1725.4	1725.1	1724.9	1726.4
180°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	49.1	51.5	53.9	55.6	56.4	57.2	58.1	58.9
90°	62.5	66.1	69.7	72.3	73.8	75.3	76.9	78.5
92.5°	92.1	96.1	100.1	102.8	104.1	105.4	106.6	108.0
95°	141.9	146.0	150.1	152.8	154.0	155.2	156.5	157.7
97.5°	200.7	204.6	208.5	210.9	211.9	212.9	213.8	214.8
100°	241.4	245.9	250.6	253.4	254.6	255.7	256.9	258.1
102.5°	283.4	288.2	292.9	296.0	297.5	298.8	300.2	301.6
105°	351.3	355.0	358.6	361.1	362.7	364.3	365.8	367.3
107.5°	425.3	427.9	430.7	432.3	432.8	433.3	433.8	434.4
110°	476.5	479.1	481.8	483.3	483.6	483.9	484.3	484.6





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CATALOG NUMBER: S125DIW-S375D1560U940-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	527.9	529.9	532.1	533.2	533.2	533.3	533.4	533.6
115°	606.5	607.8	609.1	609.9	610.2	610.5	610.7	611.0
117.5°	685.0	686.8	688.6	689.2	688.7	688.0	687.5	686.9
120°	738.1	739.6	741.2	741.6	741.0	740.4	739.7	739.0
122.5°	789.9	791.1	792.4	792.8	792.5	792.0	791.6	791.2
125°	866.6	867.4	868.3	868.8	869.0	869.1	869.2	869.4
127.5°	942.4	943.5	944.6	945.1	945.0	944.9	944.9	944.9
130°	993.0	994.0	995.0	995.4	995.2	995.1	995.0	994.8
132.5°	1041.2	1042.1	1043.1	1043.4	1042.9	1042.5	1042.1	1041.6
135°	1115.2	1116.3	1117.6	1117.8	1117.0	1116.3	1115.5	1114.8
137.5°	1187.6	1189.1	1190.5	1190.6	1189.5	1188.4	1187.2	1186.2
140°	1233.2	1234.8	1236.4	1236.7	1235.6	1234.4	1233.3	1232.2
142.5°	1278.1	1279.2	1280.5	1280.5	1279.4	1278.3	1277.2	1276.0
145°	1343.1	1343.5	1344.0	1344.0	1343.5	1342.9	1342.4	1341.8
147.5°	1403.6	1404.4	1405.3	1404.8	1402.9	1401.1	1399.2	1397.3
150°	1441.7	1441.7	1441.7	1441.5	1440.9	1440.4	1439.9	1439.4
152.5°	1477.6	1478.3	1479.0	1478.8	1477.7	1476.7	1475.6	1474.5
155°	1528.7	1530.0	1531.2	1531.1	1529.6	1528.0	1526.5	1525.1
157.5°	1573.2	1574.4	1575.6	1575.2	1573.2	1571.2	1569.2	1567.3
160°	1600.1	1601.2	1602.5	1602.3	1600.8	1599.3	1597.9	1596.3
162.5°	1625.3	1626.7	1628.2	1628.0	1626.3	1624.5	1622.8	1621.0
165°	1659.2	1660.5	1661.6	1661.3	1659.6	1657.8	1656.0	1654.1
167.5°	1684.4	1686.1	1687.9	1687.9	1686.0	1684.3	1682.4	1680.5
170°	1699.4	1701.2	1703.0	1702.9	1700.8	1698.7	1696.6	1694.5
172.5°	1710.2	1712.0	1713.8	1713.8	1711.9	1710.0	1708.2	1706.4
175°	1722.3	1724.1	1725.9	1725.7	1723.7	1721.5	1719.5	1717.3
177.5°	1727.8	1729.2	1730.6	1730.5	1728.8	1727.2	1725.5	1723.9
180°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1

(END OF REPORT)