

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: P333356

Luminaire Tested: **S125DIW-S375D1050U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333356  
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: S125DIW-S375D1050U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5712.6 lumens  
Efficiency: N/A  
Efficacy: 150.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

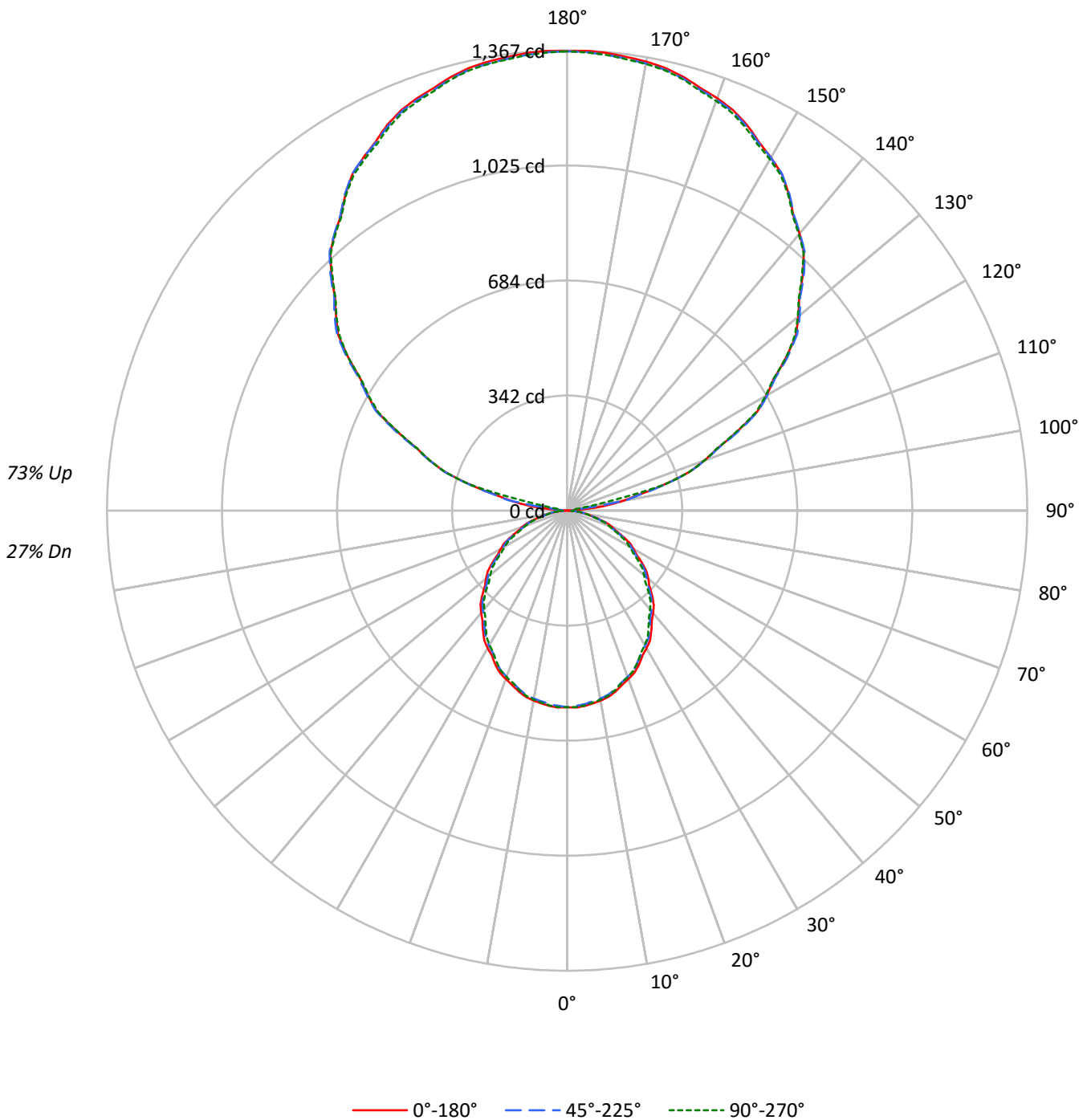
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	70	70	70	52	52	52	35	35	35	27
1	93	88	85	81	82	79	76	73	61	59	57	45	44	43	31	30	29	22
2	84	77	71	66	75	69	64	60	54	50	47	40	38	36	27	26	24	19
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	24	22	21	16
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	19	18	14
5	64	53	45	39	57	48	41	36	37	33	29	28	25	22	19	17	16	12
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10
7	54	43	35	30	48	38	32	27	30	26	22	23	19	17	16	14	12	9
8	50	39	31	26	45	35	28	24	28	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	21	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	19	15	18	14	12	12	10	9	7

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

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	1.0
10°-20°	155.6	2.7
20°-30°	229.7	4.0
30°-40°	268.1	4.7
40°-50°	269.2	4.7
50°-60°	236.3	4.1
60°-70°	176.1	3.1
70°-80°	100.7	1.8
80°-90°	32.1	0.6
90°-100°	49.6	0.9
100°-110°	305.6	5.3
110°-120°	554.2	9.7
120°-130°	711.2	12.5
130°-140°	765.0	13.4
140°-150°	718.0	12.6
150°-160°	580.8	10.2
160°-170°	375.7	6.6
170°-180°	129.6	2.3
0°-30°	440.4	7.7
0°-40°	708.5	12.4
0°-60°	1214.0	21.3
0°-90°	1522.9	26.7
90°-120°	909.3	15.9
90°-150°	3103.6	54.3
90°-180°	4190.0	73.3
0°-180°	5712.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	9	16	21	24	4
95°	58	53	16	21	21	73
105°	297	301	301	301	300	315
115°	558	563	564	560	554	553
125°	794	801	801	797	794	709
135°	990	996	994	992	986	763
145°	1148	1150	1150	1151	1145	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.2	10.5	10.9	11.3	11.6	11.9	12.2	12.4	12.6	12.8	13.1
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.0	14.6	16.2	17.3
92.5°	15.6	14.3	13.1	11.8	10.5	10.6	12.0	13.4	14.8	16.2	17.3
95°	57.6	57.0	56.3	55.6	55.0	50.3	41.8	33.3	24.7	16.2	17.3
97.5°	120.4	121.6	122.8	124.0	125.2	117.4	100.5	83.6	66.7	49.8	43.4
100°	168.9	169.6	170.2	170.9	171.6	172.4	173.3	174.2	175.1	176.0	142.5
102.5°	218.3	219.1	220.0	220.8	221.7	222.4	222.9	223.4	224.0	224.5	218.2
105°	297.3	298.2	299.1	300.0	300.9	301.4	301.4	301.4	301.4	301.4	301.4
107.5°	379.5	379.5	379.5	379.5	379.5	379.7	380.1	380.6	381.0	381.5	381.5
110°	432.9	432.9	432.9	432.9	432.9	433.1	433.5	434.0	434.4	434.9	434.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.0	483.6	484.1	484.6	485.2	485.6	485.9	486.1	486.4	486.7	485.8
115°	558.3	559.4	560.5	561.6	562.8	563.4	563.7	563.9	564.1	564.3	563.4
117.5°	636.2	636.1	636.1	636.0	636.0	636.4	637.2	638.1	638.9	639.8	638.6
120°	684.7	684.5	684.2	684.0	683.8	684.0	684.7	685.4	686.0	686.7	686.3
122.5°	727.6	728.4	729.3	730.1	731.0	731.6	731.9	732.2	732.5	732.8	732.4
125°	793.9	795.5	797.1	798.6	800.2	801.0	801.0	801.0	801.0	801.0	800.1
127.5°	857.2	858.4	859.5	860.6	861.7	862.2	862.1	862.0	861.8	861.7	861.2
130°	896.1	897.2	898.3	899.4	900.6	901.2	901.5	901.7	901.9	902.1	901.5
132.5°	934.9	936.2	937.5	938.8	940.1	940.5	940.0	939.5	939.0	938.6	938.4
135°	990.1	991.5	992.8	994.2	995.5	996.0	995.5	995.1	994.6	994.2	993.7
137.5°	1040.9	1042.1	1043.2	1044.4	1045.6	1046.0	1045.6	1045.2	1044.7	1044.3	1044.4
140°	1074.1	1074.5	1075.0	1075.4	1075.9	1076.0	1075.8	1075.5	1075.3	1075.1	1075.5
142.5°	1104.0	1104.3	1104.6	1104.8	1105.1	1105.4	1105.7	1106.0	1106.3	1106.6	1106.7
145°	1147.9	1148.4	1148.8	1149.3	1149.7	1149.9	1149.9	1149.9	1149.9	1149.9	1150.2
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.4
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	13.3	13.5	13.7	13.8	13.8	13.8	13.8	13.7
90°	18.4	19.6	20.7	21.6	22.3	22.9	23.6	24.3
92.5°	18.4	19.6	20.7	21.4	21.7	22.0	22.3	22.7
95°	18.4	19.6	20.7	21.2	21.2	21.2	21.2	21.2
97.5°	37.1	30.7	24.4	21.2	21.2	21.2	21.2	21.2
100°	109.0	75.5	42.0	24.8	23.9	23.0	22.1	21.2
102.5°	211.8	205.5	199.2	188.4	173.1	157.8	142.5	127.2
105°	301.4	301.4	301.4	301.3	301.1	300.8	300.6	300.4
107.5°	381.6	381.6	381.7	381.4	380.7	380.0	379.3	378.7
110°	433.5	432.9	432.2	432.0	432.2	432.4	432.6	432.9





TEST NUMBER: P333356

CATALOG NUMBER: S125DIW-S375D1050U835-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	485.0	484.1	483.3	482.7	482.4	482.0	481.7	481.4
115°	562.5	561.6	560.7	559.6	558.3	556.9	555.6	554.2
117.5°	637.5	636.3	635.1	634.2	633.7	633.1	632.5	631.9
120°	685.8	685.4	684.9	684.1	683.0	681.9	680.8	679.6
122.5°	731.9	731.5	731.0	730.2	728.9	727.6	726.3	725.0
125°	799.2	798.3	797.4	796.6	796.0	795.3	794.6	793.9
127.5°	860.7	860.2	859.7	858.6	857.0	855.3	853.6	852.0
130°	900.8	900.1	899.4	898.5	897.4	896.3	895.2	894.1
132.5°	938.3	938.1	938.0	937.4	936.3	935.1	934.0	932.9
135°	993.3	992.8	992.4	991.5	990.1	988.8	987.4	986.1
137.5°	1044.5	1044.6	1044.7	1044.2	1043.0	1041.8	1040.7	1039.5
140°	1076.0	1076.4	1076.9	1076.4	1075.1	1073.7	1072.4	1071.0
142.5°	1106.8	1106.9	1107.0	1106.4	1105.0	1103.7	1102.3	1101.0
145°	1150.4	1150.6	1150.8	1150.3	1148.9	1147.6	1146.2	1144.9
147.5°	1187.7	1188.0	1188.2	1187.6	1185.9	1184.3	1182.7	1181.1
150°	1211.5	1212.0	1212.4	1211.7	1209.9	1208.1	1206.3	1204.5
152.5°	1232.5	1233.0	1233.4	1232.9	1231.2	1229.6	1228.0	1226.4
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)