

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: P333355

Luminaire Tested: **S125DIW-S375D1050U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333355  
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-S375D1050U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5096.2 lumens  
Efficiency: N/A  
Efficacy: 134.1 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

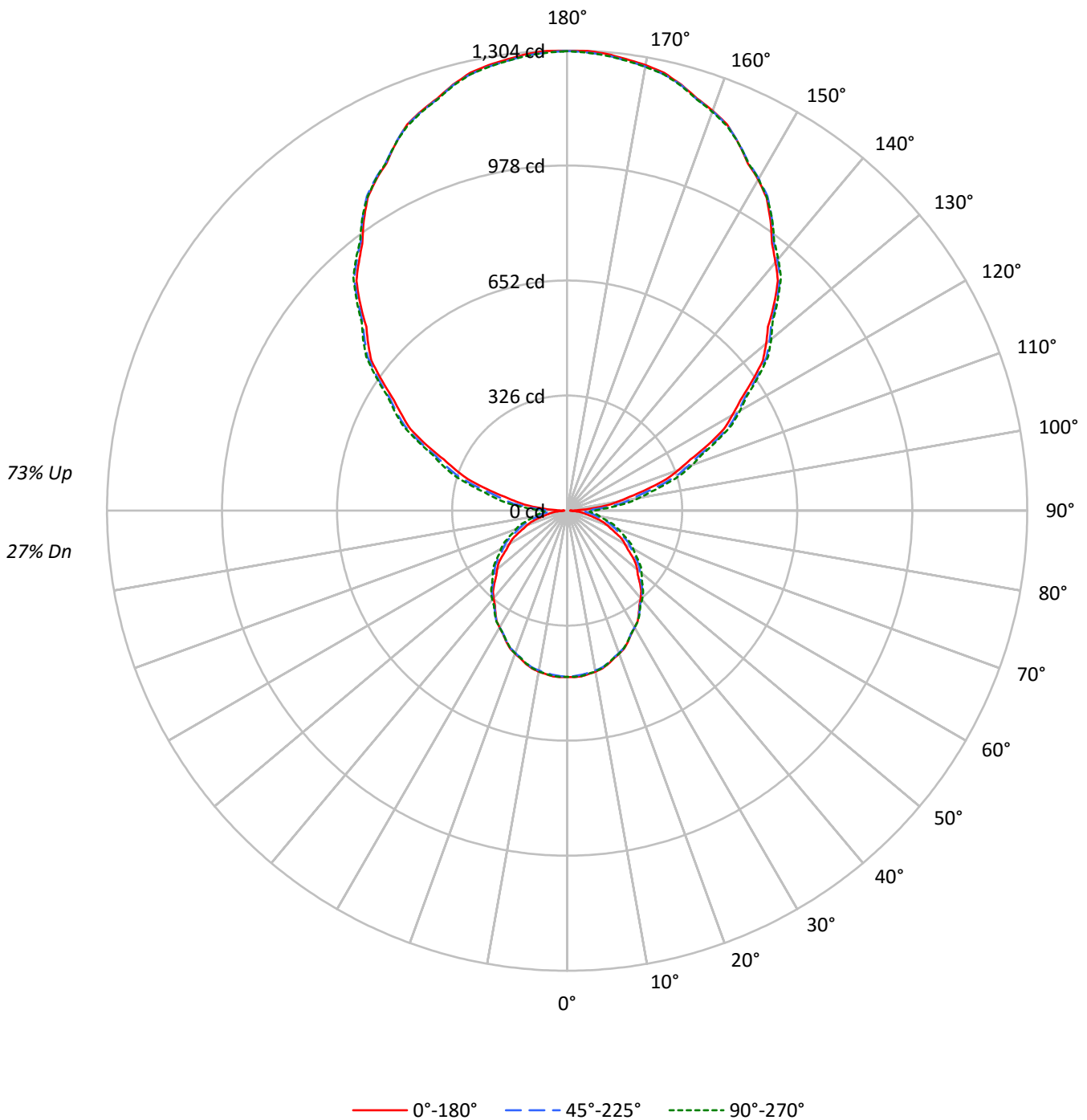
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27				
1	92	88	84	80	82	79	75	72	61	59	57	45	44	42	30	29	29	22				
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18				
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	21	20	15				
4	70	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17	13				
5	64	52	45	39	57	47	40	35	37	32	28	27	24	21	18	16	15	11				
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13	10				
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	9				
8	50	38	31	25	44	34	28	23	27	22	19	20	17	14	14	12	10	8				
9	46	35	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9	7				
10	43	32	25	20	39	28	22	18	23	18	15	17	14	12	12	10	8	6				

**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	0.9
10°-20°	126.5	2.5
20°-30°	188.2	3.7
30°-40°	222.9	4.4
40°-50°	230.5	4.5
50°-60°	212.3	4.2
60°-70°	171.6	3.4
70°-80°	114.9	2.3
80°-90°	62.4	1.2
90°-100°	120.7	2.4
100°-110°	282.2	5.5
110°-120°	452.7	8.9
120°-130°	583.4	11.4
130°-140°	647.3	12.7
140°-150°	631.2	12.4
150°-160°	529.5	10.4
160°-170°	352.0	6.9
170°-180°	123.2	2.4
0°-30°	359.3	7.1
0°-40°	582.2	11.4
0°-60°	1025.0	20.1
0°-90°	1374.0	27.0
90°-120°	855.6	16.8
90°-150°	2717.6	53.3
90°-180°	3722.0	73.0
0°-180°	5096.2	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°	8	31	54	69	76	9
95°	72	87	112	128	134	75
105°	235	248	268	282	289	251
115°	440	447	461	468	470	435
125°	639	645	655	660	662	572
135°	830	835	840	845	844	639
145°	1005	1008	1011	1013	1012	628
155°	1149	1149	1150	1154	1149	529
165°	1249	1247	1248	1252	1246	352
175°	1299	1295	1295	1300	1294	123
180°	1302	1302	1302	1302	1302	



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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°	14.6	18.3	21.9	25.6	29.2	32.9	36.7	40.6	44.4	48.2	50.8
90°	8.4	13.5	18.6	23.7	28.8	33.8	38.9	44.0	49.0	54.1	57.6
92.5°	31.2	35.5	39.8	44.1	48.4	53.3	58.8	64.3	69.8	75.3	79.1
95°	71.9	75.0	78.1	81.2	84.4	88.8	94.5	100.3	106.0	111.8	115.6
97.5°	114.9	117.5	120.1	122.6	125.2	129.7	136.2	142.7	149.2	155.7	159.3
100°	146.9	149.1	151.3	153.4	155.6	159.8	166.0	172.2	178.4	184.6	188.8
102.5°	181.4	184.3	187.2	190.1	193.0	196.8	201.5	206.2	210.9	215.6	219.8
105°	235.2	238.0	240.7	243.5	246.3	249.9	254.3	258.7	263.2	267.6	271.0
107.5°	294.6	297.1	299.7	302.2	304.7	308.0	312.0	315.9	319.9	323.9	326.6
110°	335.6	337.9	340.3	342.7	345.0	348.0	351.5	355.1	358.6	362.2	364.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.7	379.3	380.9	382.5	384.0	386.6	390.3	393.9	397.6	401.2	403.4
115°	439.5	441.1	442.7	444.3	446.0	448.3	451.5	454.6	457.7	460.8	462.4
117.5°	501.4	502.3	503.2	504.1	505.0	506.9	509.8	512.7	515.7	518.6	520.5
120°	540.4	541.8	543.2	544.7	546.1	548.1	550.7	553.3	555.9	558.4	560.2
122.5°	582.1	582.7	583.2	583.8	584.3	586.0	588.9	591.8	594.6	597.5	599.0
125°	639.2	640.4	641.7	642.9	644.2	645.9	648.2	650.5	652.8	655.1	656.3
127.5°	699.5	700.2	700.8	701.5	702.2	703.5	705.4	707.4	709.3	711.3	712.6
130°	736.0	737.0	738.0	739.1	740.1	741.5	743.4	745.3	747.2	749.1	750.3
132.5°	772.1	773.9	775.8	777.6	779.4	780.8	781.9	782.9	783.9	784.9	786.1
135°	829.8	831.0	832.3	833.5	834.8	835.9	836.8	837.7	838.7	839.6	841.0
137.5°	884.0	885.2	886.4	887.7	888.9	889.9	890.8	891.6	892.5	893.3	894.8
140°	918.5	919.6	920.7	921.9	923.0	923.9	924.7	925.5	926.3	927.0	928.6
142.5°	953.3	954.2	955.1	955.9	956.8	957.7	958.5	959.4	960.3	961.2	962.4
145°	1004.6	1005.4	1006.2	1007.0	1007.8	1008.5	1009.2	1009.9	1010.6	1011.2	1011.7
147.5°	1051.6	1052.1	1052.6	1053.0	1053.5	1054.1	1054.6	1055.1	1055.7	1056.2	1056.9
150°	1083.2	1083.0	1082.7	1082.5	1082.3	1082.6	1083.5	1084.4	1085.3	1086.2	1086.2
152.5°	1109.1	1109.4	1109.7	1110.1	1110.4	1110.7	1111.1	1111.4	1111.8	1112.2	1112.7
155°	1149.0	1149.0	1149.0	1149.0	1149.0	1149.1	1149.4	1149.6	1149.8	1150.1	1151.0
157.5°	1184.7	1184.2	1183.7	1183.2	1182.7	1182.6	1182.8	1183.0	1183.3	1183.5	1184.4
160°	1205.8	1205.1	1204.4	1203.8	1203.1	1202.9	1203.1	1203.3	1203.5	1203.8	1204.7
162.5°	1224.4	1223.9	1223.4	1222.9	1222.4	1222.2	1222.3	1222.3	1222.4	1222.4	1223.5
165°	1249.4	1248.9	1248.4	1248.0	1247.5	1247.4	1247.7	1247.9	1248.1	1248.3	1249.2
167.5°	1270.4	1269.5	1268.6	1267.7	1266.8	1266.4	1266.4	1266.4	1266.4	1266.4	1267.7
170°	1281.8	1280.9	1280.0	1279.1	1278.2	1277.7	1277.7	1277.7	1277.7	1277.7	1279.1
172.5°	1289.9	1289.0	1288.1	1287.2	1286.3	1285.8	1285.8	1285.8	1285.8	1285.8	1287.2
175°	1299.0	1298.1	1297.2	1296.3	1295.4	1294.9	1294.9	1294.9	1294.9	1294.9	1296.3
177.5°	1303.7	1302.9	1302.2	1301.5	1300.8	1300.3	1300.1	1300.0	1299.8	1299.6	1300.7
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0



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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°	53.3	55.9	58.5	60.2	61.1	61.9	62.8	63.7
90°	61.1	64.6	68.1	70.5	71.9	73.3	74.7	76.1
92.5°	82.9	86.6	90.4	92.9	94.1	95.3	96.5	97.7
95°	119.4	123.3	127.1	129.6	130.8	131.9	133.1	134.3
97.5°	162.9	166.6	170.2	172.5	173.5	174.5	175.4	176.4
100°	193.0	197.2	201.3	204.0	205.0	206.1	207.2	208.2
102.5°	224.1	228.4	232.7	235.4	236.7	237.9	239.2	240.4
105°	274.4	277.8	281.2	283.6	285.0	286.4	287.8	289.2
107.5°	329.4	332.1	334.8	336.4	337.0	337.6	338.2	338.8
110°	367.4	370.1	372.7	374.2	374.7	375.2	375.7	376.2





TEST NUMBER: P333355

CATALOG NUMBER: S125DIW-S375D1050U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	405.6	407.8	410.0	411.2	411.5	411.8	412.2	412.5
115°	464.1	465.7	467.3	468.3	468.7	469.1	469.5	469.9
117.5°	522.4	524.4	526.3	527.2	526.9	526.7	526.5	526.3
120°	561.9	563.7	565.4	566.2	565.9	565.6	565.3	565.0
122.5°	600.5	602.0	603.4	604.1	604.0	603.9	603.8	603.7
125°	657.4	658.6	659.8	660.6	660.9	661.2	661.4	661.7
127.5°	713.9	715.2	716.5	717.2	717.3	717.5	717.6	717.8
130°	751.5	752.7	754.0	754.6	754.7	754.7	754.8	754.8
132.5°	787.3	788.5	789.8	790.3	790.1	789.9	789.7	789.5
135°	842.3	843.6	845.0	845.5	845.1	844.7	844.3	843.9
137.5°	896.3	897.7	899.2	899.6	898.9	898.2	897.5	896.7
140°	930.2	931.8	933.4	933.8	933.1	932.4	931.7	930.9
142.5°	963.6	964.9	966.1	966.4	965.6	964.9	964.2	963.5
145°	1012.3	1012.8	1013.3	1013.4	1013.1	1012.9	1012.6	1012.4
147.5°	1057.6	1058.3	1059.0	1058.7	1057.4	1056.0	1054.7	1053.3
150°	1086.2	1086.2	1086.2	1086.0	1085.7	1085.3	1085.0	1084.7
152.5°	1113.2	1113.8	1114.3	1114.2	1113.4	1112.6	1111.8	1111.0
155°	1151.9	1152.8	1153.7	1153.5	1152.4	1151.3	1150.2	1149.0
157.5°	1185.3	1186.2	1187.1	1186.8	1185.3	1183.8	1182.3	1180.9
160°	1205.6	1206.5	1207.4	1207.2	1206.1	1205.0	1203.9	1202.7
162.5°	1224.6	1225.6	1226.7	1226.6	1225.3	1224.0	1222.7	1221.4
165°	1250.1	1251.0	1251.9	1251.7	1250.4	1249.0	1247.7	1246.3
167.5°	1269.1	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1280.4	1281.8	1283.1	1283.0	1281.4	1279.9	1278.3	1276.7
172.5°	1288.5	1289.9	1291.2	1291.2	1289.8	1288.4	1287.0	1285.6
175°	1297.6	1299.0	1300.4	1300.2	1298.7	1297.1	1295.5	1293.9
177.5°	1301.8	1302.9	1303.9	1303.8	1302.6	1301.3	1300.1	1298.8
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

(END OF REPORT)