

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: P333354

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333354
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-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5652.6 lumens
Efficiency: N/A
Efficacy: 148.8 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

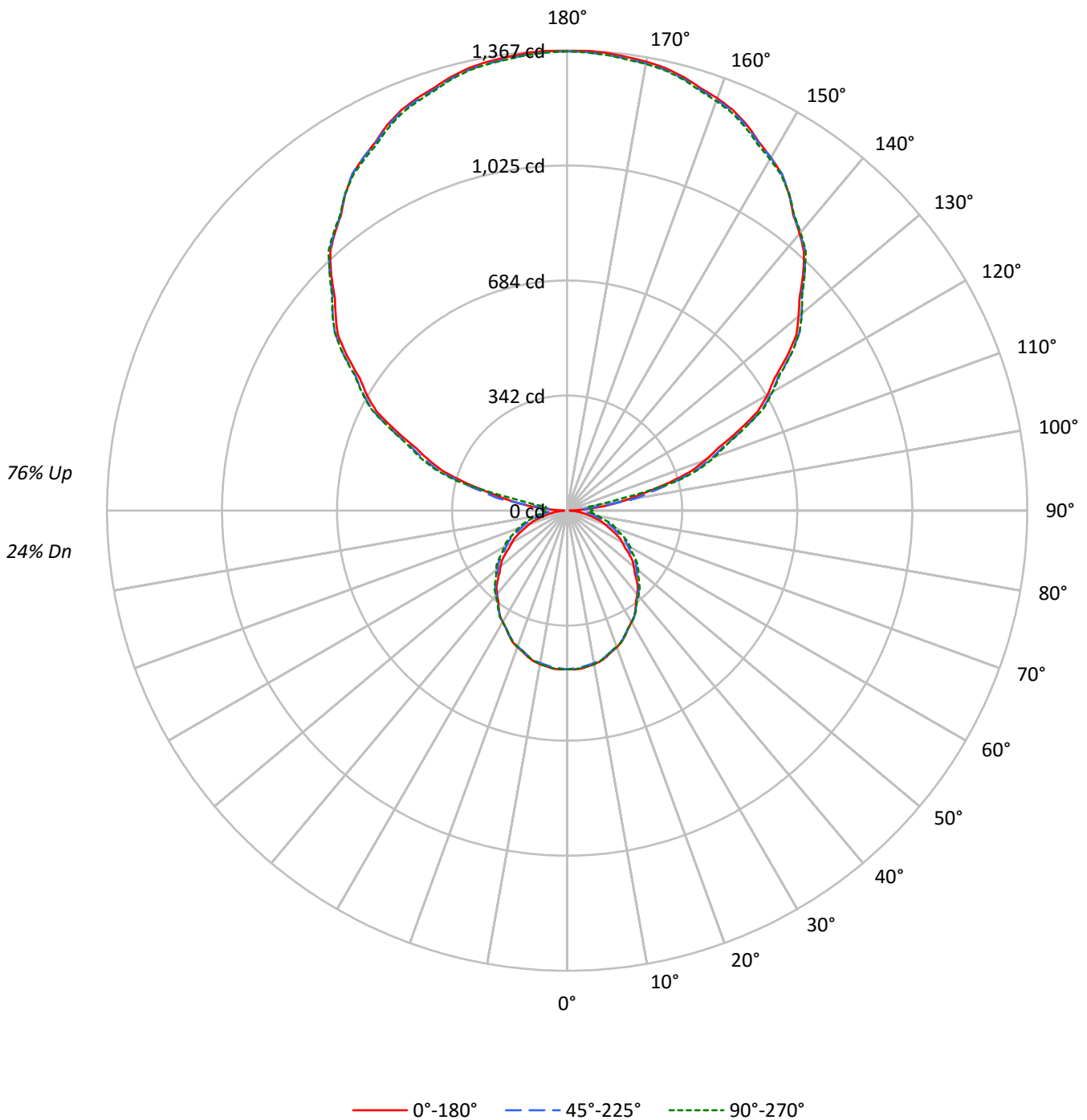
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	87	83	80	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	67	59	54	67	59	53	49	46	42	38	33	31	28	22	20	19	14
4	69	59	51	45	61	52	46	41	41	36	32	29	26	24	19	17	16	12
5	63	52	44	38	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	33	51	42	35	30	32	28	24	24	20	18	16	14	12	9
7	54	42	34	29	48	37	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	9	7
9	46	34	27	22	41	31	25	20	24	20	16	18	15	12	12	10	9	6
10	43	31	24	20	38	28	22	18	22	18	15	16	13	11	11	9	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	0.8
10°-20°	126.5	2.2
20°-30°	188.2	3.3
30°-40°	222.9	3.9
40°-50°	230.5	4.1
50°-60°	212.3	3.8
60°-70°	171.6	3.0
70°-80°	114.9	2.0
80°-90°	62.4	1.1
90°-100°	83.0	1.5
100°-110°	330.2	5.8
110°-120°	570.7	10.1
120°-130°	720.6	12.7
130°-140°	769.1	13.6
140°-150°	718.9	12.7
150°-160°	580.9	10.3
160°-170°	375.7	6.6
170°-180°	129.6	2.3
0°-30°	359.3	6.4
0°-40°	582.2	10.3
0°-60°	1025.0	18.1
0°-90°	1374.0	24.3
90°-120°	984.0	17.4
90°-150°	3192.5	56.5
90°-180°	4279.0	75.7
0°-180°	5652.6	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	7
95°	64	71	50	64	68	78
105°	302	313	327	336	338	320
115°	561	570	582	586	583	556
125°	796	803	812	815	814	710
135°	991	996	998	1001	998	764
145°	1148	1150	1150	1153	1149	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	



TEST NUMBER: P333354

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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	40.5	44.4	48.2	50.7
90°	8.4	13.5	18.6	23.7	28.7	33.8	38.9	43.9	49.0	54.1	57.6
92.5°	22.2	24.0	25.8	27.6	29.4	32.7	37.7	42.7	47.6	52.6	56.0
95°	63.7	65.7	67.6	69.6	71.6	70.1	65.1	60.0	55.0	49.9	53.3
97.5°	125.8	129.4	133.0	136.7	140.3	135.3	121.8	108.3	94.7	81.2	77.0
100°	174.0	176.8	179.6	182.5	185.3	188.8	193.0	197.2	201.4	205.6	174.2
102.5°	223.0	225.8	228.7	231.5	234.4	237.6	241.4	245.1	248.9	252.6	248.4
105°	301.5	304.0	306.6	309.1	311.7	314.5	317.6	320.6	323.7	326.8	328.9
107.5°	383.1	384.5	385.9	387.3	388.7	391.1	394.5	397.9	401.3	404.7	406.8
110°	436.1	437.3	438.6	439.8	441.0	443.3	446.6	450.0	453.3	456.6	457.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	486.3	487.8	489.3	490.8	492.4	494.7	497.7	500.8	503.9	506.9	507.9
115°	561.1	562.9	564.7	566.6	568.4	570.8	573.7	576.6	579.5	582.4	583.3
117.5°	638.5	638.9	639.3	639.7	640.2	642.1	645.5	648.8	652.2	655.6	656.2
120°	687.0	687.1	687.2	687.3	687.3	688.9	691.9	695.0	698.0	701.0	702.3
122.5°	729.5	730.5	731.5	732.5	733.5	735.3	737.9	740.5	743.1	745.7	746.9
125°	795.8	797.2	798.7	800.2	801.7	803.4	805.5	807.5	809.6	811.6	812.4
127.5°	858.6	859.6	860.7	861.7	862.7	864.0	865.5	867.1	868.6	870.2	871.2
130°	897.5	898.5	899.5	900.5	901.5	902.9	904.6	906.2	907.9	909.5	910.3
132.5°	935.9	937.2	938.5	939.8	941.1	942.0	942.6	943.2	943.9	944.5	945.8
135°	991.1	992.3	993.5	994.8	996.0	996.8	997.1	997.3	997.6	997.9	998.8
137.5°	1041.7	1042.8	1043.9	1045.0	1046.1	1046.6	1046.5	1046.5	1046.4	1046.4	1047.7
140°	1074.5	1075.0	1075.4	1075.9	1076.3	1076.5	1076.4	1076.3	1076.1	1076.0	1077.6
142.5°	1104.5	1104.7	1104.9	1105.0	1105.2	1105.5	1105.8	1106.2	1106.5	1106.8	1107.9
145°	1148.4	1148.7	1149.1	1149.4	1149.8	1149.9	1149.9	1149.9	1149.9	1149.9	1150.7
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.6
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°	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	63.6
90°	61.1	64.5	68.0	70.5	71.9	73.2	74.6	76.0
92.5°	59.4	62.8	66.2	68.4	69.5	70.5	71.5	72.6
95°	56.7	60.1	63.5	65.5	66.2	66.9	67.7	68.4
97.5°	72.8	68.6	64.5	62.7	63.4	64.1	64.8	65.5
100°	142.9	111.6	80.2	64.4	64.1	63.9	63.6	63.3
102.5°	244.1	239.8	235.6	226.1	211.4	196.8	182.1	167.4
105°	330.9	333.0	335.0	336.3	336.8	337.3	337.8	338.3
107.5°	408.8	410.9	413.0	414.0	414.0	413.9	413.9	413.9
110°	459.2	460.4	461.7	462.8	463.8	464.7	465.7	466.6



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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	508.9	510.0	511.0	511.7	512.1	512.5	512.9	513.3
115°	584.3	585.2	586.2	586.3	585.5	584.8	584.1	583.3
117.5°	656.8	657.3	657.9	658.3	658.4	658.5	658.6	658.7
120°	703.6	704.9	706.2	706.6	706.1	705.6	705.1	704.6
122.5°	748.1	749.3	750.5	750.8	750.1	749.4	748.7	748.1
125°	813.1	813.9	814.6	814.9	814.7	814.6	814.4	814.3
127.5°	872.2	873.3	874.3	874.3	873.2	872.1	871.1	870.0
130°	911.1	911.8	912.6	912.7	912.1	911.4	910.8	910.2
132.5°	947.1	948.4	949.7	950.0	949.3	948.6	947.9	947.2
135°	999.6	1000.5	1001.4	1001.4	1000.6	999.8	998.9	998.1
137.5°	1049.0	1050.3	1051.6	1051.9	1051.1	1050.3	1049.6	1048.8
140°	1079.2	1080.8	1082.3	1082.7	1081.7	1080.8	1079.8	1078.9
142.5°	1108.9	1110.0	1111.0	1111.1	1110.2	1109.2	1108.3	1107.4
145°	1151.4	1152.1	1152.9	1152.8	1151.8	1150.9	1150.0	1149.0
147.5°	1188.0	1188.5	1188.9	1188.4	1187.0	1185.5	1184.1	1182.7
150°	1211.5	1212.0	1212.4	1211.8	1210.1	1208.4	1206.7	1205.0
152.5°	1232.5	1233.0	1233.4	1232.9	1231.3	1229.7	1228.1	1226.5
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)