

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: P333355-830

Luminaire Tested: **S125DIW-S375D1050U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333355-830
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-S375D1050U830-4F0-1E-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: 4803.4 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

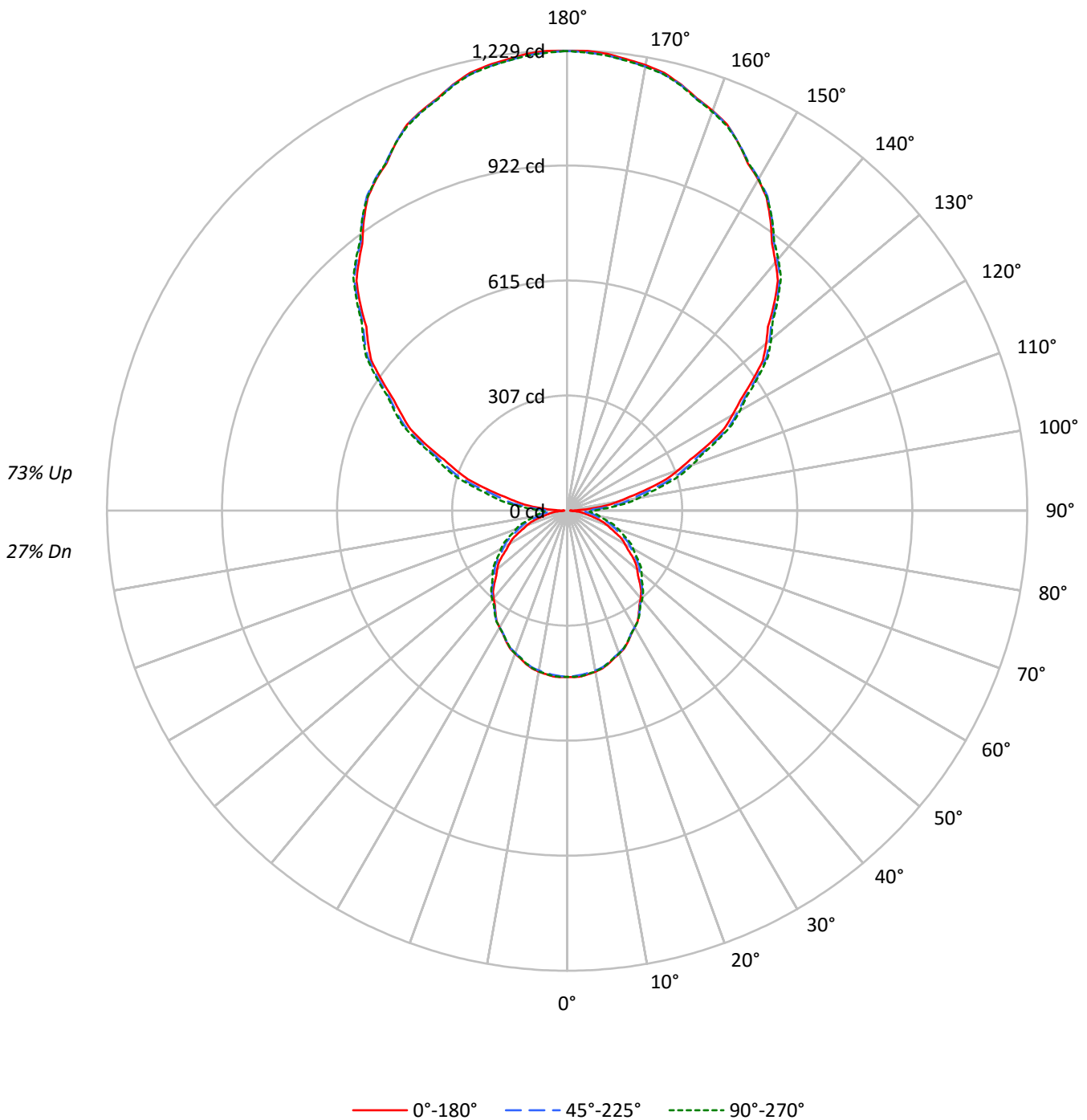
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

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	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°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	0.9
10°-20°	119.3	2.5
20°-30°	177.4	3.7
30°-40°	210.1	4.4
40°-50°	217.2	4.5
50°-60°	200.1	4.2
60°-70°	161.8	3.4
70°-80°	108.3	2.3
80°-90°	58.9	1.2
90°-100°	113.7	2.4
100°-110°	266.0	5.5
110°-120°	426.7	8.9
120°-130°	549.9	11.4
130°-140°	610.1	12.7
140°-150°	595.0	12.4
150°-160°	499.1	10.4
160°-170°	331.7	6.9
170°-180°	116.1	2.4
0°-30°	338.7	7.1
0°-40°	548.8	11.4
0°-60°	966.1	20.1
0°-90°	1295.0	27.0
90°-120°	806.4	16.8
90°-150°	2561.4	53.3
90°-180°	3508.0	73.0
0°-180°	4803.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	30	51	65	72	8
95°	68	82	105	121	127	71
105°	222	234	252	266	273	237
115°	414	421	434	441	443	410
125°	602	608	618	622	624	539
135°	782	787	791	797	795	603
145°	947	950	953	955	954	592
155°	1083	1083	1084	1087	1083	499
165°	1178	1176	1177	1180	1175	332
175°	1224	1221	1220	1226	1220	116
180°	1227	1227	1227	1227	1227	



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.2	20.6	24.1	27.5	31.0	34.6	38.3	41.8	45.4	47.9
90°	7.9	12.7	17.5	22.3	27.1	31.9	36.7	41.5	46.2	51.0	54.3
92.5°	29.4	33.5	37.5	41.6	45.6	50.2	55.4	60.6	65.8	71.0	74.6
95°	67.8	70.7	73.6	76.5	79.6	83.7	89.1	94.5	99.9	105.4	109.0
97.5°	108.3	110.7	113.2	115.6	118.0	122.2	128.4	134.5	140.6	146.8	150.1
100°	138.5	140.5	142.6	144.6	146.7	150.6	156.5	162.3	168.1	174.0	178.0
102.5°	171.0	173.7	176.4	179.2	181.9	185.5	189.9	194.4	198.8	203.2	207.2
105°	221.7	224.3	226.9	229.5	232.1	235.5	239.7	243.8	248.1	252.2	255.4
107.5°	277.7	280.0	282.5	284.8	287.2	290.3	294.1	297.7	301.5	305.3	307.8
110°	316.3	318.5	320.7	323.0	325.2	328.0	331.3	334.7	338.0	341.4	343.8



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	356.0	357.5	359.0	360.5	361.9	364.4	367.9	371.3	374.8	378.1	380.2
115°	414.2	415.8	417.3	418.8	420.4	422.5	425.6	428.5	431.4	434.3	435.8
117.5°	472.6	473.4	474.3	475.1	476.0	477.8	480.5	483.2	486.1	488.8	490.6
120°	509.3	510.7	512.0	513.4	514.7	516.6	519.1	521.5	524.0	526.3	528.0
122.5°	548.7	549.2	549.7	550.3	550.7	552.3	555.1	557.8	560.4	563.2	564.6
125°	602.5	603.6	604.8	606.0	607.2	608.8	611.0	613.1	615.3	617.5	618.6
127.5°	659.3	660.0	660.5	661.2	661.9	663.1	664.9	666.8	668.5	670.4	671.7
130°	693.7	694.7	695.6	696.6	697.6	698.9	700.7	702.5	704.3	706.1	707.2
132.5°	727.7	729.4	731.2	732.9	734.6	735.9	737.0	737.9	738.9	739.8	740.9
135°	782.1	783.3	784.5	785.6	786.8	787.9	788.7	789.6	790.5	791.4	792.7
137.5°	833.2	834.3	835.5	836.7	837.8	838.8	839.6	840.4	841.2	842.0	843.4
140°	865.7	866.8	867.8	868.9	870.0	870.8	871.6	872.3	873.1	873.7	875.2
142.5°	898.5	899.4	900.2	901.0	901.8	902.7	903.4	904.3	905.1	906.0	907.1
145°	946.9	947.6	948.4	949.1	949.9	950.6	951.2	951.9	952.5	953.1	953.6
147.5°	991.2	991.6	992.1	992.5	993.0	993.5	994.0	994.5	995.0	995.5	996.2
150°	1021.0	1020.8	1020.5	1020.3	1020.1	1020.4	1021.2	1022.1	1022.9	1023.8	1023.8
152.5°	1045.4	1045.7	1045.9	1046.3	1046.6	1046.9	1047.3	1047.5	1047.9	1048.3	1048.8
155°	1083.0	1083.0	1083.0	1083.0	1083.0	1083.1	1083.4	1083.5	1083.7	1084.0	1084.9
157.5°	1116.6	1116.2	1115.7	1115.2	1114.7	1114.7	1114.8	1115.0	1115.3	1115.5	1116.3
160°	1136.5	1135.9	1135.2	1134.6	1134.0	1133.8	1134.0	1134.2	1134.3	1134.6	1135.5
162.5°	1154.0	1153.6	1153.1	1152.6	1152.2	1152.0	1152.1	1152.1	1152.2	1152.2	1153.2
165°	1177.6	1177.1	1176.7	1176.3	1175.8	1175.7	1176.0	1176.2	1176.4	1176.6	1177.4
167.5°	1197.4	1196.6	1195.7	1194.9	1194.0	1193.6	1193.6	1193.6	1193.6	1193.6	1194.9
170°	1208.2	1207.3	1206.5	1205.6	1204.8	1204.3	1204.3	1204.3	1204.3	1204.3	1205.6
172.5°	1215.8	1214.9	1214.1	1213.2	1212.4	1211.9	1211.9	1211.9	1211.9	1211.9	1213.2
175°	1224.4	1223.5	1222.7	1221.8	1221.0	1220.5	1220.5	1220.5	1220.5	1220.5	1221.8
177.5°	1228.8	1228.0	1227.4	1226.7	1226.1	1225.6	1225.4	1225.3	1225.1	1224.9	1226.0
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	50.2	52.7	55.1	56.7	57.6	58.3	59.2	60.0
90°	57.6	60.9	64.2	66.4	67.8	69.1	70.4	71.7
92.5°	78.1	81.6	85.2	87.6	88.7	89.8	91.0	92.1
95°	112.5	116.2	119.8	122.2	123.3	124.3	125.5	126.6
97.5°	153.5	157.0	160.4	162.6	163.5	164.5	165.3	166.3
100°	181.9	185.9	189.7	192.3	193.2	194.3	195.3	196.2
102.5°	211.2	215.3	219.3	221.9	223.1	224.2	225.5	226.6
105°	258.6	261.8	265.0	267.3	268.6	269.9	271.3	272.6
107.5°	310.5	313.0	315.6	317.1	317.6	318.2	318.8	319.3
110°	346.3	348.8	351.3	352.7	353.2	353.6	354.1	354.6



TEST NUMBER: P333355-830

CATALOG NUMBER: S125DIW-S375D1050U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	382.3	384.4	386.4	387.6	387.9	388.1	388.5	388.8
115°	437.4	438.9	440.5	441.4	441.8	442.1	442.5	442.9
117.5°	492.4	494.3	496.1	496.9	496.6	496.4	496.2	496.1
120°	529.6	531.3	532.9	533.7	533.4	533.1	532.8	532.5
122.5°	566.0	567.4	568.7	569.4	569.3	569.2	569.1	569.0
125°	619.6	620.8	621.9	622.6	622.9	623.2	623.4	623.7
127.5°	672.9	674.1	675.3	676.0	676.1	676.3	676.4	676.6
130°	708.3	709.5	710.7	711.2	711.3	711.3	711.4	711.4
132.5°	742.1	743.2	744.4	744.9	744.7	744.5	744.3	744.1
135°	793.9	795.1	796.4	796.9	796.5	796.2	795.8	795.4
137.5°	844.8	846.1	847.5	847.9	847.3	846.6	845.9	845.2
140°	876.8	878.3	879.8	880.1	879.5	878.8	878.2	877.4
142.5°	908.2	909.5	910.6	910.9	910.1	909.5	908.8	908.1
145°	954.1	954.6	955.1	955.2	954.9	954.7	954.4	954.2
147.5°	996.8	997.5	998.2	997.9	996.6	995.3	994.1	992.8
150°	1023.8	1023.8	1023.8	1023.6	1023.3	1022.9	1022.7	1022.4
152.5°	1049.2	1049.8	1050.3	1050.2	1049.4	1048.7	1047.9	1047.2
155°	1085.7	1086.6	1087.4	1087.2	1086.2	1085.1	1084.1	1083.0
157.5°	1117.2	1118.0	1118.9	1118.6	1117.2	1115.8	1114.4	1113.0
160°	1136.3	1137.2	1138.0	1137.8	1136.8	1135.8	1134.7	1133.6
162.5°	1154.2	1155.2	1156.2	1156.1	1154.9	1153.7	1152.4	1151.2
165°	1178.3	1179.1	1180.0	1179.8	1178.6	1177.2	1176.0	1174.7
167.5°	1196.2	1197.4	1198.7	1198.7	1197.4	1196.1	1194.8	1193.4
170°	1206.8	1208.2	1209.4	1209.3	1207.8	1206.4	1204.9	1203.3
172.5°	1214.5	1215.8	1217.0	1217.0	1215.7	1214.4	1213.1	1211.7
175°	1223.0	1224.4	1225.7	1225.5	1224.1	1222.6	1221.1	1219.6
177.5°	1227.0	1228.0	1229.0	1228.9	1227.8	1226.5	1225.4	1224.2
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2

(END OF REPORT)