

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: P332568-940

Luminaire Tested: **S124DIP-S575D1035U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332568-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D1035U940-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5907.2 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Indirect

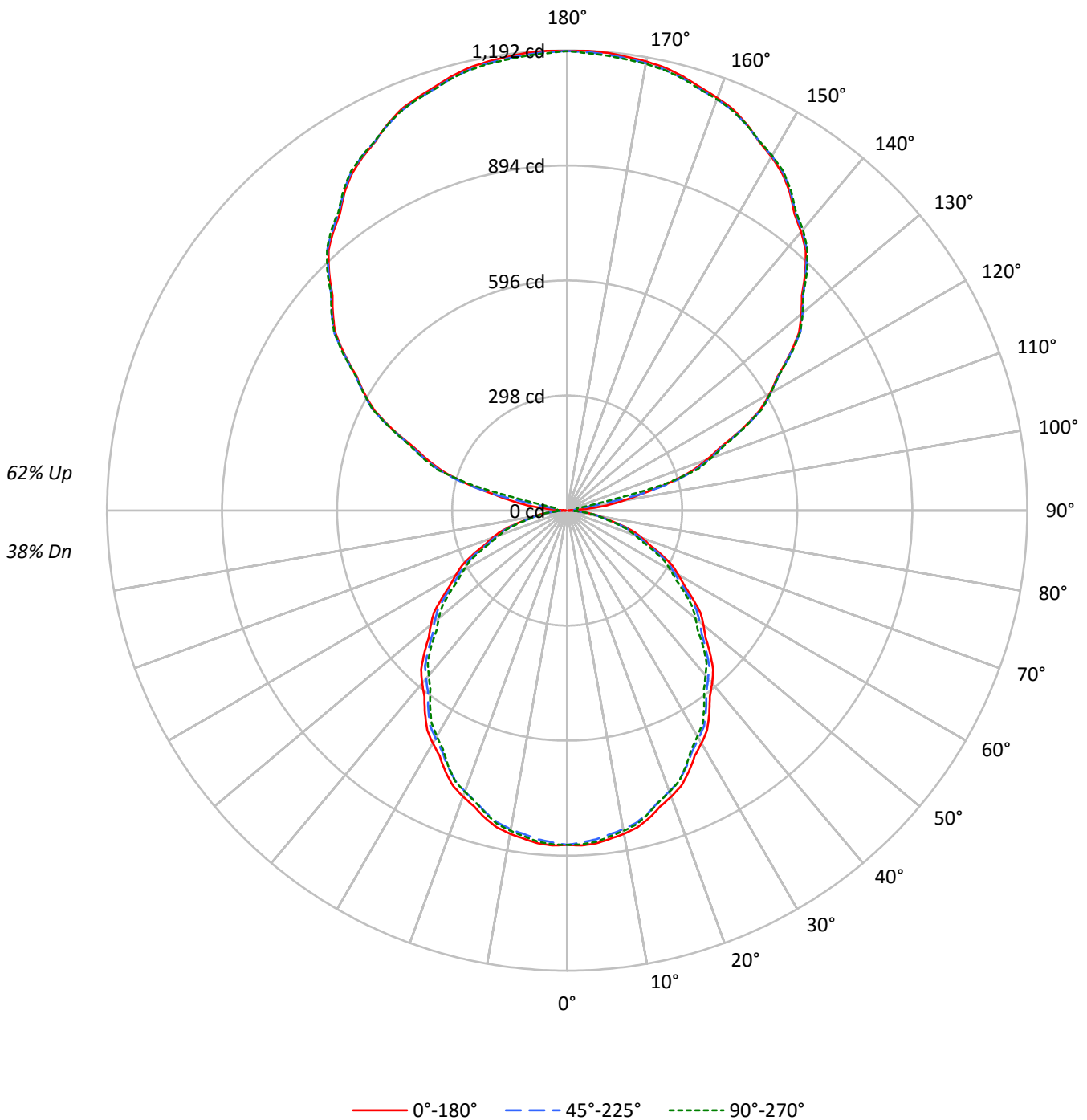
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	76	76	76		60	60	60		45	45	45	38
1	95	91	87	83	86	82	79	76	67	65	63		53	51	50		40	39	38	32
2	86	79	73	68	78	72	67	63	59	55	52		46	44	42		35	33	32	26
3	79	70	62	57	71	63	57	52	52	47	43		41	38	35		31	29	27	22
4	72	61	54	48	65	56	49	44	46	41	37		36	33	30		27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	35	55	45	38	33	37	32	28		29	26	23		22	20	18	15
7	56	44	36	31	51	40	34	29	33	28	24		27	23	20		20	18	16	13
8	52	40	32	27	47	37	30	25	30	25	22		24	21	18		19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19		22	19	16		17	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17		21	17	14		16	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6990	6990	6990
5°	7012	6928	6978
10°	6968	6871	6906
15°	6884	6774	6791
20°	6772	6653	6659
25°	6644	6515	6495
30°	6488	6352	6293
35°	6326	6182	6099
40°	6157	5989	5879
45°	5981	5799	5688
50°	5786	5630	5456
55°	5576	5410	5234
60°	5365	5165	5007
65°	5129	4932	4732
70°	4865	4617	4440
75°	4457	4242	4133
80°	3966	3808	3710
85°	3473	3344	3279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	1.4
10°-20°	229.8	3.9
20°-30°	338.2	5.7
30°-40°	393.2	6.7
40°-50°	393.2	6.7
50°-60°	343.9	5.8
60°-70°	255.4	4.3
70°-80°	145.1	2.5
80°-90°	45.3	0.8
90°-100°	40.7	0.7
100°-110°	259.5	4.4
110°-120°	496.5	8.4
120°-130°	630.3	10.7
130°-140°	674.3	11.4
140°-150°	630.6	10.7
150°-160°	508.5	8.6
160°-170°	328.0	5.6
170°-180°	113.0	1.9
0°-30°	649.5	11.0
0°-40°	1042.7	17.7
0°-60°	1779.8	30.1
0°-90°	2225.7	37.7
90°-120°	796.7	13.5
90°-150°	2731.9	46.2
90°-180°	3681.0	62.3
0°-180°	5907.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	862	861	82
15°	824	820	810	814	812	232
25°	746	741	731	732	729	343
35°	642	637	627	622	619	401
45°	524	519	508	501	498	404
55°	396	394	384	376	372	355
65°	268	265	258	251	248	266
75°	143	139	136	133	132	152
85°	38	37	36	36	35	41
90°	3	12	20	25	27	4
95°	49	20	20	25	26	63
105°	268	273	278	284	254	280
115°	500	503	502	504	504	492
125°	703	706	705	708	709	628
135°	872	872	875	877	879	672
145°	1006	1008	1008	1010	1011	628
155°	1103	1104	1101	1104	1102	508
165°	1163	1159	1159	1165	1158	329
175°	1190	1185	1186	1193	1183	113
180°	1190	1190	1190	1190	1190	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9
2.5°	868.2	867.8	867.5	867.1	866.7	865.9	864.5	863.2	861.7	860.4	861.7
5°	865.3	864.7	864.1	863.4	862.8	861.7	860.0	858.3	856.6	854.9	856.6
7.5°	857.2	856.6	856.0	855.4	854.8	853.5	851.7	849.8	847.8	846.0	847.4
10°	850.0	849.4	848.8	848.2	847.6	846.2	844.3	842.2	840.3	838.2	839.5
12.5°	840.6	840.0	839.4	838.7	838.1	836.8	834.6	832.5	830.4	828.2	829.6
15°	823.7	823.0	822.4	821.8	821.2	819.7	817.4	815.1	812.8	810.5	811.4
17.5°	803.3	802.5	801.7	800.9	800.1	798.7	796.5	794.3	792.1	790.0	790.5
20°	788.3	787.5	786.8	786.0	785.2	783.6	781.3	779.0	776.7	774.4	774.8
22.5°	772.1	771.2	770.2	769.1	768.1	766.4	764.1	761.8	759.5	757.2	758.0
25°	745.9	744.8	743.8	742.7	741.6	740.0	737.8	735.7	733.5	731.4	731.6
27.5°	716.0	714.9	713.7	712.7	711.5	710.0	707.9	706.0	703.9	702.0	701.6
30°	696.0	694.7	693.5	692.2	691.1	689.4	687.4	685.4	683.4	681.4	680.8
32.5°	674.8	673.8	672.6	671.5	670.5	668.8	666.7	664.6	662.5	660.3	659.6
35°	641.9	640.8	639.7	638.6	637.6	635.9	633.7	631.6	629.5	627.3	626.2
37.5°	607.0	606.0	605.0	604.0	603.1	601.5	599.1	596.8	594.5	592.2	591.0
40°	584.2	583.0	581.8	580.6	579.3	577.6	575.2	572.9	570.6	568.3	566.8
42.5°	559.8	559.1	558.4	557.6	556.9	555.2	552.7	550.1	547.5	545.0	543.2
45°	523.9	522.8	521.7	520.7	519.6	517.8	515.3	512.8	510.4	507.9	506.2
47.5°	486.2	485.5	484.8	484.0	483.3	481.8	479.6	477.2	474.9	472.7	470.7
50°	460.7	460.1	459.5	458.9	458.3	456.9	454.8	452.5	450.4	448.3	446.1
52.5°	435.8	435.1	434.3	433.5	432.8	431.3	429.0	426.8	424.5	422.1	420.3
55°	396.2	395.7	395.3	394.8	394.4	393.1	390.9	388.7	386.6	384.4	382.5
57.5°	358.5	357.9	357.4	356.9	356.3	355.1	352.9	350.8	348.7	346.5	344.7
60°	332.3	331.6	330.8	330.0	329.3	327.9	325.9	323.9	321.9	319.9	318.5
62.5°	306.8	306.2	305.5	304.9	304.3	302.8	300.8	298.6	296.5	294.4	293.1
65°	268.5	267.8	267.0	266.3	265.5	264.3	262.8	261.2	259.7	258.2	256.5
67.5°	230.0	229.3	228.5	227.8	227.1	226.0	224.5	223.1	221.6	220.1	218.6
70°	206.1	205.0	203.9	202.9	201.8	200.6	199.4	198.1	196.9	195.6	194.5
72.5°	180.6	179.5	178.4	177.3	176.2	175.2	174.2	173.3	172.3	171.2	170.2
75°	142.9	142.1	141.4	140.6	139.8	139.1	138.3	137.5	136.8	136.0	135.4
77.5°	107.0	106.6	106.3	106.0	105.7	105.1	104.4	103.8	103.1	102.5	102.2
80°	85.3	84.9	84.4	84.0	83.5	83.1	82.8	82.5	82.2	81.9	81.6
82.5°	64.3	64.0	63.8	63.6	63.4	63.2	63.2	63.1	63.0	63.0	62.8
85°	37.5	37.5	37.5	37.5	37.5	37.3	37.0	36.7	36.4	36.1	36.1
87.5°	15.0	15.2	15.6	15.9	16.2	16.5	16.7	16.9	17.0	17.2	17.5
90°	2.7	4.8	7.0	9.2	11.4	13.3	14.8	16.4	18.0	19.6	20.8
92.5°	11.2	11.3	11.4	11.6	11.7	12.6	14.1	15.7	17.3	18.9	20.1
95°	49.0	42.3	35.5	28.8	22.0	18.8	19.0	19.2	19.4	19.6	20.8
97.5°	104.0	108.2	112.4	116.5	120.7	111.8	89.7	67.7	45.6	23.5	23.6
100°	146.0	149.5	153.1	156.7	160.2	148.4	121.1	93.8	66.4	39.1	35.8
102.5°	193.0	195.6	198.2	200.8	203.4	203.0	199.4	195.8	192.3	188.7	152.4
105°	268.0	269.1	270.3	271.5	272.7	273.8	274.7	275.7	276.8	277.8	279.6
107.5°	337.5	338.1	338.8	339.3	339.9	340.9	342.2	343.6	344.9	346.3	347.1
110°	384.6	385.1	385.8	386.3	386.9	387.8	389.0	390.2	391.4	392.5	393.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	430.2	431.2	432.3	433.4	434.4	435.2	435.8	436.3	436.8	437.4	437.4
115°	500.2	500.9	501.5	502.0	502.7	502.8	502.7	502.5	502.2	502.0	502.5
117.5°	563.5	564.3	565.1	565.9	566.7	567.2	567.7	568.1	568.6	569.0	568.9
120°	606.2	607.0	607.8	608.6	609.4	609.7	609.5	609.3	609.0	608.9	609.3
122.5°	646.0	646.6	647.0	647.5	648.0	648.4	648.6	648.9	649.2	649.4	649.7
125°	703.2	704.0	704.8	705.6	706.4	706.6	706.2	705.8	705.4	705.0	705.6
127.5°	757.3	757.5	757.8	758.0	758.1	758.7	759.6	760.5	761.4	762.3	762.2
130°	792.3	792.5	792.6	792.8	793.0	793.4	794.1	794.6	795.2	795.9	796.0
132.5°	824.3	824.7	825.0	825.4	825.7	826.3	827.1	827.8	828.5	829.3	829.5
135°	872.4	872.2	872.0	871.7	871.6	871.8	872.6	873.4	874.2	875.0	875.4
137.5°	914.9	915.0	915.1	915.2	915.3	915.7	916.6	917.5	918.3	919.2	919.6
140°	942.7	943.1	943.5	943.9	944.2	944.7	945.0	945.5	945.8	946.3	946.8
142.5°	967.6	968.3	969.0	969.7	970.4	970.9	971.2	971.4	971.6	971.9	972.3
145°	1005.8	1006.5	1007.1	1007.6	1008.3	1008.5	1008.5	1008.5	1008.5	1008.5	1008.8
147.5°	1036.3	1037.4	1038.6	1039.6	1040.8	1041.3	1041.0	1040.8	1040.6	1040.4	1040.6
150°	1058.4	1059.2	1060.0	1060.8	1061.6	1061.8	1061.7	1061.5	1061.3	1061.0	1061.0
152.5°	1076.9	1077.5	1078.2	1078.8	1079.4	1079.6	1079.2	1078.9	1078.5	1078.2	1078.5
155°	1103.0	1103.1	1103.3	1103.5	1103.7	1103.5	1103.0	1102.3	1101.7	1101.2	1101.9
157.5°	1124.8	1124.7	1124.5	1124.4	1124.4	1123.9	1123.3	1122.6	1122.0	1121.2	1122.3
160°	1137.6	1137.0	1136.5	1135.9	1135.2	1134.9	1134.7	1134.4	1134.3	1134.1	1135.2
162.5°	1149.1	1148.3	1147.5	1146.7	1146.0	1145.6	1145.3	1145.1	1145.0	1144.8	1145.9
165°	1163.4	1162.4	1161.5	1160.5	1159.5	1159.0	1159.0	1159.0	1159.0	1159.0	1160.6
167.5°	1174.8	1173.8	1172.8	1171.8	1170.7	1170.2	1170.0	1169.9	1169.8	1169.7	1171.4
170°	1181.2	1180.1	1178.8	1177.7	1176.5	1176.0	1176.2	1176.4	1176.6	1176.8	1178.4
172.5°	1185.5	1184.4	1183.1	1182.0	1180.8	1180.3	1180.4	1180.7	1180.9	1181.1	1182.7
175°	1190.2	1189.0	1187.8	1186.6	1185.4	1184.9	1185.1	1185.4	1185.5	1185.7	1187.5
177.5°	1192.3	1191.1	1190.1	1189.0	1187.8	1187.5	1187.8	1188.1	1188.4	1188.7	1190.0
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	865.9	865.9	865.9	865.9	865.9	865.9	865.9	865.9
2.5°	862.9	864.2	865.4	865.9	865.8	865.7	865.6	865.4
5°	858.3	860.0	861.7	862.4	862.0	861.7	861.4	861.1
7.5°	848.7	850.1	851.4	852.0	851.9	851.7	851.5	851.2
10°	840.7	842.0	843.2	843.6	843.3	843.0	842.7	842.4
12.5°	831.0	832.3	833.7	834.1	833.7	833.2	832.9	832.4
15°	812.3	813.2	814.1	814.4	814.0	813.5	813.0	812.5
17.5°	791.1	791.7	792.3	792.4	792.1	791.8	791.5	791.2
20°	775.3	775.8	776.2	776.3	776.0	775.7	775.4	775.1
22.5°	758.8	759.6	760.5	760.6	760.1	759.6	759.0	758.4
25°	731.6	731.8	732.0	731.7	731.1	730.5	729.9	729.2
27.5°	701.2	700.8	700.4	699.9	699.1	698.4	697.6	696.8
30°	680.2	679.6	678.9	678.2	677.4	676.7	675.9	675.1
32.5°	658.8	658.1	657.4	656.6	655.9	655.1	654.2	653.5
35°	625.1	624.0	622.9	622.1	621.3	620.5	619.7	618.9
37.5°	589.9	588.6	587.5	586.4	585.4	584.3	583.4	582.3
40°	565.3	563.7	562.1	561.0	560.2	559.5	558.7	557.9
42.5°	541.4	539.6	537.8	536.6	536.2	535.7	535.1	534.6
45°	504.5	502.8	501.1	500.1	499.6	499.2	498.6	498.2
47.5°	468.9	466.9	465.0	463.5	462.4	461.1	459.9	458.8
50°	443.9	441.8	439.6	438.1	437.1	436.2	435.3	434.4
52.5°	418.3	416.4	414.6	413.0	411.8	410.6	409.5	408.3
55°	380.8	378.9	377.0	375.6	374.7	373.8	372.8	371.9
57.5°	343.0	341.3	339.5	338.1	337.2	336.4	335.5	334.6
60°	317.1	315.8	314.3	313.3	312.5	311.7	310.9	310.1
62.5°	291.9	290.5	289.3	288.3	287.5	286.8	286.0	285.2
65°	255.0	253.5	252.0	250.8	250.0	249.2	248.5	247.7
67.5°	217.1	215.7	214.2	213.3	213.1	212.9	212.7	212.5
70°	193.2	192.0	190.7	189.9	189.4	189.0	188.5	188.1
72.5°	169.2	168.3	167.3	166.6	166.1	165.7	165.2	164.7
75°	134.7	134.1	133.6	133.1	133.0	132.9	132.7	132.5
77.5°	102.0	101.8	101.7	101.4	100.9	100.6	100.1	99.8
80°	81.2	81.0	80.6	80.4	80.3	80.1	80.0	79.8
82.5°	62.6	62.4	62.2	62.1	62.0	61.8	61.6	61.4
85°	36.1	36.1	36.1	36.0	35.8	35.7	35.6	35.4
87.5°	17.7	17.9	18.2	18.4	18.5	18.5	18.5	18.6
90°	21.9	23.2	24.3	25.1	25.5	25.9	26.3	26.7
92.5°	21.2	22.5	23.6	24.3	24.3	24.4	24.5	24.6
95°	21.9	23.2	24.3	25.1	25.2	25.4	25.6	25.8
97.5°	23.7	23.9	24.0	24.2	24.3	24.5	24.7	25.0
100°	32.5	29.1	25.7	24.2	24.3	24.5	24.7	25.0
102.5°	116.2	79.9	43.6	25.5	25.5	25.6	25.6	25.7
105°	281.3	283.0	284.8	282.2	275.1	268.0	260.8	253.7
107.5°	348.0	348.9	349.7	350.5	351.3	352.0	352.8	353.6
110°	393.3	393.8	394.1	394.7	395.2	395.8	396.5	397.0



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CATALOG NUMBER: S124DIP-S575D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	437.3	437.2	437.1	437.5	438.2	439.0	439.7	440.4
115°	502.8	503.3	503.6	503.8	503.8	503.8	503.8	503.8
117.5°	568.8	568.7	568.6	568.6	568.6	568.5	568.4	568.3
120°	609.7	610.0	610.5	610.5	610.0	609.7	609.3	608.9
122.5°	650.0	650.1	650.4	650.3	650.0	649.5	649.2	648.7
125°	706.2	706.8	707.4	707.8	708.0	708.2	708.4	708.6
127.5°	762.1	762.0	761.9	761.7	761.6	761.4	761.3	761.1
130°	796.2	796.4	796.6	796.7	796.7	796.7	796.7	796.7
132.5°	829.6	829.9	830.1	830.1	829.9	829.7	829.6	829.5
135°	875.8	876.2	876.6	877.0	877.4	877.8	878.2	878.6
137.5°	920.1	920.5	921.0	921.0	921.0	920.9	920.7	920.6
140°	947.4	948.1	948.6	949.0	949.2	949.4	949.6	949.9
142.5°	972.8	973.2	973.7	973.8	973.9	973.9	974.0	974.0
145°	1009.0	1009.1	1009.3	1009.7	1010.0	1010.4	1010.8	1011.2
147.5°	1040.7	1040.9	1041.1	1041.3	1041.4	1041.6	1041.9	1042.1
150°	1061.0	1061.0	1061.0	1061.1	1061.4	1061.6	1061.8	1061.9
152.5°	1078.8	1079.1	1079.4	1079.5	1079.4	1079.3	1079.1	1079.1
155°	1102.7	1103.5	1104.3	1104.4	1103.8	1103.2	1102.6	1102.1
157.5°	1123.3	1124.4	1125.3	1125.3	1124.4	1123.3	1122.3	1121.2
160°	1136.5	1137.6	1138.8	1138.8	1137.6	1136.5	1135.2	1134.1
162.5°	1147.1	1148.3	1149.5	1149.4	1148.1	1146.7	1145.4	1144.1
165°	1162.2	1163.8	1165.3	1165.2	1163.4	1161.6	1159.8	1158.1
167.5°	1173.1	1174.9	1176.6	1176.5	1174.6	1172.6	1170.5	1168.6
170°	1180.0	1181.5	1183.1	1182.9	1181.0	1179.0	1177.0	1175.0
172.5°	1184.3	1185.8	1187.4	1187.1	1185.0	1182.9	1180.7	1178.6
175°	1189.3	1191.1	1192.8	1192.5	1190.2	1187.8	1185.4	1183.0
177.5°	1191.2	1192.5	1193.8	1193.5	1191.6	1189.7	1187.8	1185.9
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2

(END OF REPORT)