

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: P333393-930

Luminaire Tested: **S125DIW-S610D1340U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333393-930
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-S610D1340U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5832.6 lumens
Efficiency: N/A
Efficacy: 108.4 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

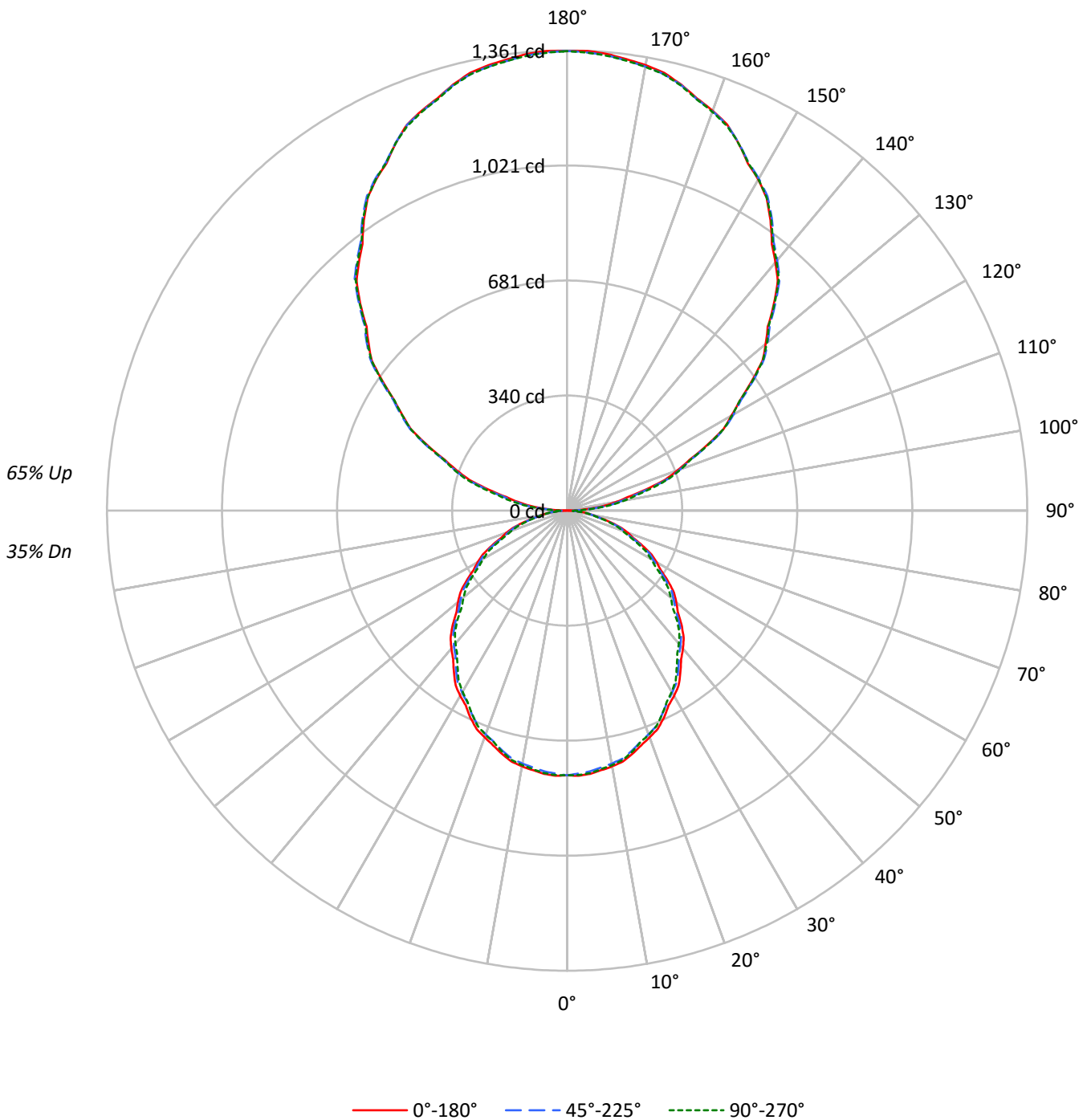
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	36	36	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	70	63	57	52	51	46	43	39	36	34	29	27	25	21
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.3
10°-20°	208.5	3.6
20°-30°	307.9	5.3
30°-40°	359.3	6.2
40°-50°	360.9	6.2
50°-60°	316.8	5.4
60°-70°	236.0	4.0
70°-80°	135.0	2.3
80°-90°	42.2	0.7
90°-100°	91.0	1.6
100°-110°	268.8	4.6
110°-120°	455.3	7.8
120°-130°	599.1	10.3
130°-140°	671.4	11.5
140°-150°	658.0	11.3
150°-160°	552.7	9.5
160°-170°	367.4	6.3
170°-180°	128.6	2.2
0°-30°	590.3	10.1
0°-40°	949.6	16.3
0°-60°	1627.2	27.9
0°-90°	2040.4	35.0
90°-120°	815.1	14.0
90°-150°	2743.6	47.0
90°-180°	3792.0	65.0
0°-180°	5832.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	38
90°	1	10	17	22	25	6
95°	69	71	81	89	91	73
105°	241	246	253	259	262	258
115°	456	460	462	461	460	451
125°	665	671	673	671	669	596
135°	865	871	872	872	868	667
145°	1048	1052	1056	1055	1052	655
155°	1199	1199	1200	1204	1199	552
165°	1304	1302	1303	1307	1301	368
175°	1356	1352	1352	1357	1350	129
180°	1359	1359	1359	1359	1359	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.6	13.9	14.3	14.8	15.1	15.4	15.6	15.8	16.1	16.3	16.5
90°	1.1	2.9	4.8	6.7	8.6	10.4	12.0	13.6	15.2	17.0	18.1
92.5°	25.6	26.9	28.2	29.5	30.8	32.5	34.6	36.6	38.6	40.6	42.2
95°	68.7	69.2	69.7	70.1	70.6	72.1	74.4	76.7	79.1	81.4	83.1
97.5°	114.2	114.4	114.6	114.8	115.0	116.7	119.9	123.2	126.5	129.6	131.2
100°	148.1	148.1	148.1	148.1	148.1	149.6	152.6	155.7	158.7	161.8	164.0
102.5°	184.4	185.4	186.3	187.3	188.2	189.5	191.0	192.6	194.1	195.7	198.0
105°	241.2	242.3	243.4	244.7	245.8	247.1	248.5	250.0	251.4	252.7	254.2
107.5°	303.7	304.9	306.1	307.3	308.4	309.6	310.6	311.7	312.8	313.9	314.6
110°	346.9	348.1	349.3	350.4	351.6	352.5	353.3	353.9	354.7	355.3	356.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	390.9	391.5	392.1	392.7	393.3	394.1	394.9	395.8	396.7	397.6	397.9
115°	455.8	456.7	457.7	458.6	459.6	460.3	460.7	461.2	461.7	462.2	461.9
117.5°	521.0	521.4	521.8	522.2	522.7	523.1	523.5	523.9	524.3	524.8	525.0
120°	561.6	562.7	563.9	565.1	566.3	567.0	567.2	567.4	567.7	567.9	567.9
122.5°	605.6	606.0	606.4	606.8	607.2	607.8	608.4	609.0	609.6	610.3	610.0
125°	665.2	666.6	668.1	669.4	670.8	671.6	671.9	672.1	672.4	672.6	672.1
127.5°	728.6	729.4	730.3	731.1	731.9	732.4	732.7	733.0	733.3	733.5	733.3
130°	766.7	767.9	769.1	770.3	771.4	772.3	772.7	773.2	773.6	774.1	773.9
132.5°	804.8	806.7	808.7	810.6	812.5	813.4	813.3	813.3	813.2	813.1	812.9
135°	865.1	866.5	867.9	869.4	870.7	871.6	871.8	872.0	872.3	872.5	872.5
137.5°	921.8	923.2	924.5	925.9	927.2	928.1	928.7	929.2	929.8	930.3	930.5
140°	958.1	959.4	960.5	961.7	962.9	963.8	964.5	965.2	965.9	966.6	967.1
142.5°	994.6	995.6	996.5	997.5	998.5	999.4	1000.3	1001.2	1002.1	1003.0	1003.3
145°	1048.1	1049.0	1049.9	1050.8	1051.8	1052.6	1053.4	1054.0	1054.8	1055.5	1055.5
147.5°	1097.6	1098.0	1098.6	1099.1	1099.6	1100.2	1100.7	1101.3	1101.9	1102.4	1103.0
150°	1130.6	1130.3	1130.1	1129.8	1129.6	1129.9	1130.9	1131.9	1132.8	1133.8	1133.8
152.5°	1157.6	1158.0	1158.3	1158.6	1158.9	1159.3	1159.7	1160.0	1160.4	1160.8	1161.4
155°	1199.3	1199.3	1199.3	1199.3	1199.3	1199.4	1199.6	1199.9	1200.1	1200.4	1201.3
157.5°	1236.5	1236.0	1235.5	1234.9	1234.4	1234.3	1234.5	1234.8	1235.0	1235.3	1236.2
160°	1258.5	1257.8	1257.1	1256.4	1255.7	1255.5	1255.7	1256.0	1256.1	1256.4	1257.4
162.5°	1278.0	1277.5	1276.9	1276.4	1275.9	1275.7	1275.7	1275.8	1275.8	1275.9	1277.0
165°	1304.0	1303.5	1303.0	1302.6	1302.1	1302.0	1302.2	1302.4	1302.7	1302.9	1303.9
167.5°	1326.0	1325.0	1324.1	1323.1	1322.3	1321.8	1321.8	1321.8	1321.8	1321.8	1323.1
170°	1337.8	1336.9	1335.9	1335.1	1334.1	1333.6	1333.6	1333.6	1333.6	1333.6	1335.1
172.5°	1346.3	1345.3	1344.4	1343.5	1342.6	1342.1	1342.1	1342.1	1342.1	1342.1	1343.5
175°	1355.8	1354.9	1354.0	1353.0	1352.1	1351.6	1351.6	1351.6	1351.6	1351.6	1353.0
177.5°	1360.7	1359.9	1359.2	1358.5	1357.6	1357.2	1357.0	1356.8	1356.7	1356.4	1357.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	16.7	17.0	17.2	17.3	17.2	17.1	17.0	17.0
90°	19.2	20.5	21.6	22.6	23.2	24.0	24.7	25.4
92.5°	43.7	45.2	46.8	47.9	48.3	48.9	49.4	49.9
95°	84.7	86.3	88.1	89.0	89.5	90.0	90.5	91.0
97.5°	132.7	134.3	135.8	136.8	137.1	137.4	137.6	137.9
100°	166.1	168.1	170.2	171.5	172.0	172.5	173.0	173.4
102.5°	200.2	202.5	204.9	206.4	207.0	207.7	208.3	209.0
105°	255.6	257.0	258.4	259.4	260.2	260.9	261.5	262.3
107.5°	315.3	316.0	316.7	317.1	317.0	316.9	316.9	316.8
110°	356.8	357.4	358.2	358.4	358.2	357.9	357.7	357.4



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CATALOG NUMBER: S125DIW-S610D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	398.3	398.6	398.9	398.9	398.5	398.1	397.6	397.2
115°	461.7	461.5	461.2	461.0	460.7	460.5	460.3	460.1
117.5°	525.1	525.3	525.5	525.1	524.2	523.3	522.4	521.4
120°	567.9	567.9	567.9	567.4	566.5	565.6	564.6	563.7
122.5°	609.8	609.7	609.4	609.0	608.2	607.5	606.7	606.0
125°	671.6	671.2	670.7	670.4	670.2	669.9	669.7	669.4
127.5°	733.0	732.8	732.6	732.2	731.8	731.3	730.8	730.3
130°	773.6	773.5	773.2	772.8	772.4	771.9	771.4	770.9
132.5°	812.6	812.4	812.1	811.7	811.1	810.3	809.7	809.0
135°	872.5	872.5	872.5	872.0	871.1	870.2	869.2	868.3
137.5°	930.8	931.1	931.4	930.9	929.8	928.5	927.4	926.3
140°	967.6	968.0	968.5	968.2	966.9	965.8	964.7	963.4
142.5°	1003.6	1003.9	1004.1	1003.7	1002.5	1001.4	1000.1	999.0
145°	1055.5	1055.5	1055.5	1055.1	1054.4	1053.7	1053.0	1052.3
147.5°	1103.5	1104.1	1104.6	1104.2	1102.5	1101.0	1099.3	1097.8
150°	1133.8	1133.8	1133.8	1133.5	1133.0	1132.5	1132.0	1131.6
152.5°	1161.9	1162.5	1163.0	1162.9	1162.0	1161.2	1160.3	1159.5
155°	1202.2	1203.1	1204.1	1204.0	1202.8	1201.7	1200.4	1199.3
157.5°	1237.1	1238.0	1239.0	1238.7	1237.1	1235.6	1234.0	1232.5
160°	1258.3	1259.2	1260.1	1260.0	1258.9	1257.7	1256.5	1255.3
162.5°	1278.1	1279.2	1280.3	1280.3	1278.9	1277.5	1276.2	1274.8
165°	1304.8	1305.8	1306.7	1306.4	1305.0	1303.7	1302.2	1300.8
167.5°	1324.6	1326.0	1327.4	1327.4	1325.9	1324.5	1323.0	1321.5
170°	1336.4	1337.8	1339.2	1339.1	1337.5	1335.9	1334.2	1332.5
172.5°	1344.9	1346.3	1347.7	1347.7	1346.2	1344.8	1343.3	1341.8
175°	1354.4	1355.8	1357.2	1357.1	1355.4	1353.8	1352.2	1350.5
177.5°	1358.7	1359.8	1361.0	1360.9	1359.5	1358.2	1356.9	1355.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0

(END OF REPORT)