

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: P333391-940

Luminaire Tested: **S125DIW-S610D1340U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333391-940
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-S610D1340U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP 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: 6291.3 lumens
Efficiency: N/A
Efficacy: 116.9 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

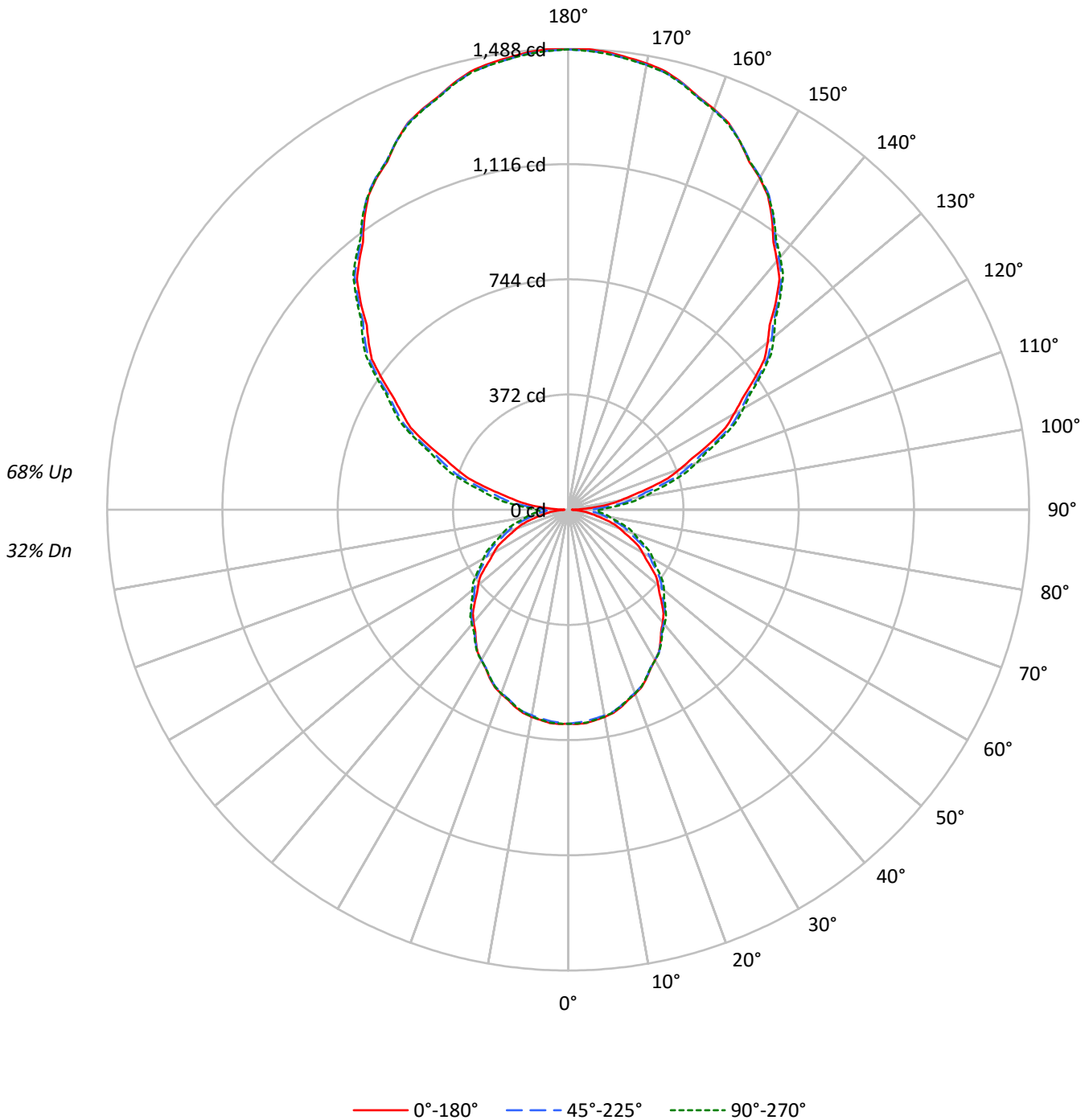
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	63	61	59	48	47	45	34	33	32	26
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.0
10°-20°	185.5	2.9
20°-30°	275.9	4.4
30°-40°	326.8	5.2
40°-50°	337.9	5.4
50°-60°	311.2	4.9
60°-70°	251.6	4.0
70°-80°	168.5	2.7
80°-90°	90.6	1.4
90°-100°	148.6	2.4
100°-110°	330.1	5.2
110°-120°	522.2	8.3
120°-130°	669.1	10.6
130°-140°	740.3	11.8
140°-150°	720.9	11.5
150°-160°	604.5	9.6
160°-170°	401.8	6.4
170°-180°	140.6	2.2
0°-30°	526.7	8.4
0°-40°	853.5	13.6
0°-60°	1502.6	23.9
0°-90°	2013.3	32.0
90°-120°	1000.9	15.9
90°-150°	3131.1	49.8
90°-180°	4278.0	68.0
0°-180°	6291.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	12	43	74	95	104	11
95°	84	105	138	161	169	87
105°	270	287	314	334	342	288
115°	503	513	532	542	546	497
125°	730	737	751	759	762	654
135°	948	954	960	968	967	730
145°	1147	1151	1154	1158	1157	717
155°	1312	1312	1313	1317	1312	604
165°	1426	1424	1425	1429	1423	402
175°	1483	1479	1478	1484	1477	141
180°	1486	1486	1486	1486	1486	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.4	26.6	31.8	37.1	42.3	47.6	53.1	58.6	64.1	69.6	73.3
90°	12.0	18.9	25.8	32.6	39.5	46.4	53.3	60.2	67.1	74.1	78.8
92.5°	37.7	43.6	49.6	55.5	61.3	68.0	75.4	82.9	90.3	97.8	102.8
95°	84.0	88.5	92.8	97.3	101.7	107.8	115.5	123.1	130.8	138.5	143.7
97.5°	133.0	136.6	140.4	144.1	147.8	153.9	162.4	170.9	179.4	187.9	192.7
100°	169.4	172.5	175.8	178.9	182.0	187.7	195.8	204.0	212.1	220.3	225.8
102.5°	208.7	212.6	216.5	220.5	224.4	229.6	236.0	242.4	248.8	255.2	260.7
105°	269.8	273.5	277.2	280.9	284.6	289.4	295.5	301.6	307.6	313.7	318.3
107.5°	337.5	340.8	344.1	347.5	350.8	355.3	360.8	366.3	371.8	377.3	381.0
110°	384.1	387.3	390.3	393.4	396.5	400.6	405.6	410.5	415.5	420.5	424.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	432.2	434.4	436.5	438.6	440.7	444.3	449.3	454.4	459.5	464.6	467.7
115°	502.6	504.7	506.8	508.8	511.0	514.2	518.6	523.1	527.4	531.9	534.3
117.5°	573.2	574.4	575.5	576.7	577.8	580.4	584.6	588.8	593.0	597.1	599.9
120°	617.6	619.3	621.1	622.8	624.6	627.2	631.0	634.7	638.5	642.1	644.7
122.5°	665.1	665.8	666.6	667.2	667.9	670.2	674.2	678.2	682.2	686.3	688.5
125°	730.3	731.6	733.1	734.4	735.8	738.2	741.5	744.7	748.0	751.3	753.1
127.5°	799.0	799.7	800.4	801.2	801.9	803.6	806.4	809.2	812.0	814.8	816.7
130°	840.6	841.8	842.9	844.0	845.2	847.0	849.7	852.3	854.9	857.6	859.4
132.5°	881.7	883.8	885.9	888.0	890.0	891.9	893.4	894.9	896.4	898.0	899.8
135°	947.5	949.0	950.3	951.7	953.1	954.5	955.7	957.1	958.4	959.7	961.6
137.5°	1009.4	1010.8	1012.1	1013.5	1014.9	1016.1	1017.2	1018.2	1019.3	1020.4	1022.5
140°	1048.7	1049.9	1051.2	1052.5	1053.8	1054.9	1055.8	1056.8	1057.7	1058.5	1060.8
142.5°	1088.4	1089.4	1090.4	1091.3	1092.3	1093.2	1094.2	1095.3	1096.3	1097.3	1099.0
145°	1146.9	1147.8	1148.7	1149.6	1150.5	1151.3	1152.1	1152.8	1153.6	1154.4	1155.1
147.5°	1200.4	1201.0	1201.6	1202.1	1202.7	1203.3	1203.9	1204.5	1205.1	1205.8	1206.6
150°	1236.5	1236.3	1236.0	1235.7	1235.5	1235.8	1236.9	1238.0	1238.9	1240.0	1240.0
152.5°	1266.1	1266.5	1266.9	1267.2	1267.6	1267.9	1268.4	1268.7	1269.2	1269.6	1270.2
155°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.8	1312.1	1312.3	1312.6	1312.9	1313.8
157.5°	1352.4	1351.8	1351.3	1350.7	1350.1	1350.0	1350.2	1350.5	1350.8	1351.0	1352.0
160°	1376.4	1375.7	1374.9	1374.1	1373.4	1373.1	1373.4	1373.7	1373.9	1374.1	1375.2
162.5°	1397.8	1397.2	1396.6	1396.1	1395.5	1395.3	1395.3	1395.3	1395.3	1395.4	1396.7
165°	1426.2	1425.7	1425.1	1424.7	1424.2	1424.1	1424.2	1424.5	1424.8	1425.0	1426.1
167.5°	1450.3	1449.2	1448.2	1447.2	1446.2	1445.6	1445.6	1445.6	1445.6	1445.6	1447.2
170°	1463.2	1462.2	1461.2	1460.2	1459.1	1458.6	1458.6	1458.6	1458.6	1458.6	1460.2
172.5°	1472.5	1471.4	1470.4	1469.4	1468.4	1467.8	1467.8	1467.8	1467.8	1467.8	1469.4
175°	1482.9	1481.8	1480.9	1479.8	1478.8	1478.3	1478.3	1478.3	1478.3	1478.3	1479.8
177.5°	1488.2	1487.4	1486.6	1485.8	1484.9	1484.4	1484.2	1484.0	1483.8	1483.5	1484.8
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	77.0	80.7	84.4	86.9	88.1	89.3	90.5	91.8
90°	83.6	88.3	93.1	96.3	98.2	100.0	101.8	103.6
92.5°	107.9	112.9	118.0	121.3	122.9	124.6	126.2	127.8
95°	148.7	153.8	159.0	162.3	163.9	165.4	167.0	168.6
97.5°	197.6	202.4	207.3	210.4	211.8	213.0	214.4	215.7
100°	231.3	236.7	242.3	245.7	247.1	248.5	249.9	251.4
102.5°	266.3	271.9	277.4	281.0	282.7	284.3	285.9	287.5
105°	322.8	327.3	331.9	335.1	337.0	338.8	340.6	342.4
107.5°	384.9	388.6	392.4	394.7	395.6	396.4	397.3	398.1
110°	427.8	431.4	435.0	437.2	438.0	438.8	439.6	440.4



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CATALOG NUMBER: S125DIW-S610D1340U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	470.8	473.9	477.0	478.8	479.5	480.0	480.6	481.2
115°	536.8	539.2	541.7	543.2	543.9	544.6	545.2	545.8
117.5°	602.6	605.4	608.1	609.6	609.6	609.6	609.6	609.6
120°	647.3	649.8	652.4	653.6	653.4	653.4	653.3	653.1
122.5°	690.7	692.9	695.2	696.3	696.4	696.5	696.6	696.7
125°	755.0	756.9	758.8	760.0	760.5	761.0	761.5	762.0
127.5°	818.7	820.6	822.6	823.8	824.1	824.5	824.8	825.3
130°	861.2	863.1	865.0	866.0	866.2	866.5	866.7	866.9
132.5°	901.6	903.5	905.4	906.2	906.2	906.1	906.0	905.9
135°	963.6	965.5	967.5	968.4	968.1	967.8	967.5	967.2
137.5°	1024.6	1026.6	1028.8	1029.5	1028.8	1028.1	1027.4	1026.7
140°	1062.9	1065.1	1067.3	1068.0	1067.3	1066.7	1066.0	1065.2
142.5°	1100.7	1102.4	1104.2	1104.7	1104.0	1103.3	1102.7	1102.0
145°	1155.9	1156.6	1157.4	1157.7	1157.5	1157.4	1157.2	1157.0
147.5°	1207.5	1208.3	1209.2	1208.9	1207.4	1205.9	1204.4	1202.9
150°	1240.0	1240.0	1240.0	1239.8	1239.4	1239.0	1238.7	1238.3
152.5°	1270.8	1271.4	1272.0	1271.9	1271.0	1270.2	1269.3	1268.4
155°	1314.9	1315.9	1317.0	1316.8	1315.5	1314.3	1313.0	1311.7
157.5°	1353.1	1354.1	1355.1	1354.8	1353.1	1351.4	1349.7	1348.0
160°	1376.2	1377.2	1378.2	1378.1	1376.9	1375.6	1374.3	1373.0
162.5°	1397.9	1399.1	1400.3	1400.3	1398.7	1397.2	1395.8	1394.3
165°	1427.1	1428.2	1429.1	1428.9	1427.4	1425.8	1424.2	1422.7
167.5°	1448.8	1450.3	1451.8	1451.8	1450.2	1448.6	1447.0	1445.4
170°	1461.7	1463.2	1464.7	1464.6	1462.9	1461.1	1459.2	1457.4
172.5°	1471.0	1472.5	1474.0	1474.0	1472.4	1470.8	1469.2	1467.6
175°	1481.3	1482.9	1484.4	1484.3	1482.5	1480.7	1478.9	1477.1
177.5°	1486.0	1487.3	1488.5	1488.4	1486.9	1485.5	1484.1	1482.6
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4

(END OF REPORT)