

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: P333384-940

Luminaire Tested: **S125DIW-S610D1050U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333384-940
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-S610D1050U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 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: 5878.9 lumens
Efficiency: N/A
Efficacy: 130.1 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

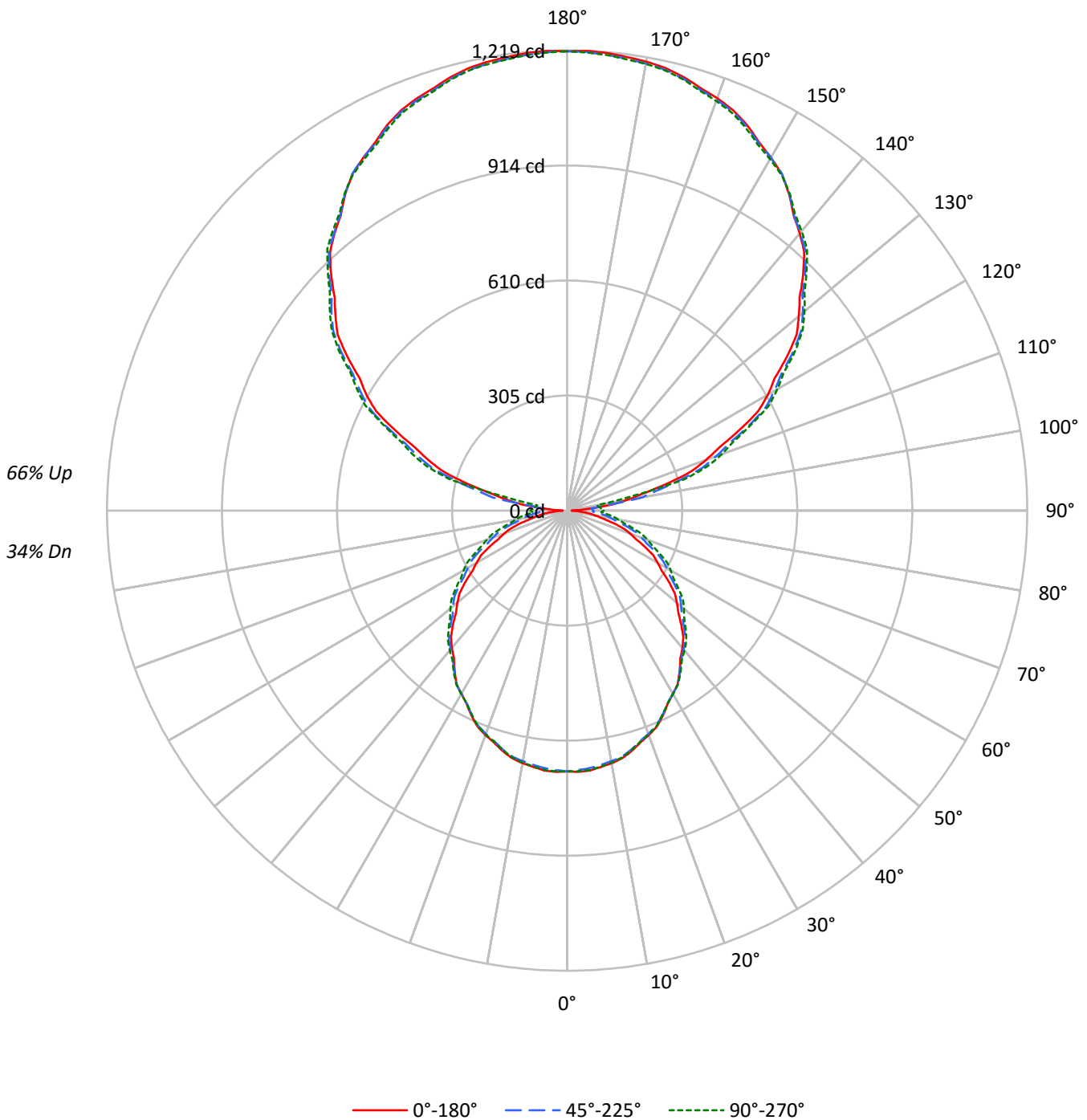
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	75	75	57	57	57	42	42	42	34
1	94	89	85	82	84	81	77	74	64	62	60	50	48	47	36	35	34	28
2	85	78	71	66	76	70	65	60	56	52	49	43	41	39	31	30	28	23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	63	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	53	43	36	31	35	30	26	27	23	21	20	17	15	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

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	1.1
10°-20°	185.5	3.2
20°-30°	275.9	4.7
30°-40°	326.8	5.6
40°-50°	337.9	5.7
50°-60°	311.2	5.3
60°-70°	251.6	4.3
70°-80°	168.5	2.9
80°-90°	89.9	1.5
90°-100°	93.2	1.6
100°-110°	308.6	5.2
110°-120°	518.4	8.8
120°-130°	648.0	11.0
130°-140°	688.2	11.7
140°-150°	641.5	10.9
150°-160°	518.0	8.8
160°-170°	335.0	5.7
170°-180°	115.5	2.0
0°-30°	526.7	9.0
0°-40°	853.5	14.5
0°-60°	1502.6	25.6
0°-90°	2012.6	34.2
90°-120°	920.3	15.7
90°-150°	2897.9	49.3
90°-180°	3866.0	65.8
0°-180°	5878.9	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	41	70	89	98	9
95°	60	74	64	82	88	72
105°	271	286	306	319	323	288
115°	502	512	530	538	537	497
125°	711	717	730	737	738	634
135°	884	889	892	898	897	681
145°	1024	1025	1025	1029	1027	640
155°	1127	1122	1124	1126	1119	519
165°	1190	1184	1185	1190	1183	336
175°	1217	1212	1212	1218	1211	116
180°	1217	1217	1217	1217	1217	



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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°	21.3	26.5	31.6	36.7	41.9	47.2	52.5	58.0	63.3	68.8	72.4
90°	11.8	18.2	24.6	31.0	37.5	43.9	50.4	57.0	63.5	70.0	74.5
92.5°	23.6	27.0	30.3	33.6	37.0	41.9	48.3	54.8	61.3	67.9	72.1
95°	60.2	63.5	66.9	70.2	73.5	73.8	71.3	68.8	66.3	63.8	68.2
97.5°	115.3	119.9	124.5	129.1	133.8	131.0	120.8	110.8	100.6	90.4	87.9
100°	158.1	161.8	165.6	169.3	173.1	177.8	183.4	189.0	194.7	200.3	173.6
102.5°	201.5	205.2	208.9	212.6	216.2	220.7	225.9	231.0	236.2	241.4	238.8
105°	271.3	274.5	277.7	280.9	284.1	287.9	292.5	296.9	301.5	306.0	309.1
107.5°	343.7	345.7	347.8	349.8	351.9	355.3	360.0	364.7	369.4	374.2	377.2
110°	390.7	392.5	394.3	396.2	398.0	401.2	405.8	410.4	415.0	419.6	421.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	435.5	437.4	439.3	441.2	443.2	446.3	450.7	455.0	459.3	463.7	465.7
115°	501.9	503.9	506.0	508.1	510.1	513.2	517.3	521.4	525.6	529.7	531.5
117.5°	570.7	571.3	571.9	572.6	573.3	575.8	580.3	584.8	589.2	593.7	595.2
120°	613.9	614.2	614.5	614.7	614.9	617.1	621.2	625.3	629.3	633.4	635.5
122.5°	651.7	652.6	653.6	654.5	655.5	657.8	661.5	665.0	668.7	672.3	674.3
125°	710.7	711.9	713.2	714.4	715.7	717.8	720.9	723.8	726.8	729.9	731.5
127.5°	766.4	767.3	768.1	769.0	769.8	771.4	773.8	776.1	778.5	780.9	782.7
130°	801.1	801.9	802.8	803.6	804.5	806.0	808.3	810.7	813.0	815.3	816.8
132.5°	835.2	836.3	837.4	838.6	839.7	840.9	842.0	843.2	844.5	845.6	847.6
135°	884.3	885.3	886.4	887.4	888.5	889.3	890.0	890.6	891.3	892.0	893.5
137.5°	929.4	930.3	931.2	932.2	933.1	933.6	933.8	933.9	934.1	934.2	936.1
140°	958.4	958.9	959.2	959.7	960.0	960.2	960.2	960.1	960.1	960.0	962.1
142.5°	985.2	985.3	985.3	985.5	985.6	985.9	986.1	986.5	986.8	987.0	988.6
145°	1024.3	1024.5	1024.8	1025.0	1025.3	1025.4	1025.4	1025.4	1025.4	1025.4	1026.4
147.5°	1057.8	1057.8	1057.7	1057.7	1057.6	1057.7	1057.8	1058.1	1058.4	1058.5	1059.1
150°	1079.5	1079.1	1078.7	1078.3	1077.9	1077.9	1078.3	1078.7	1079.1	1079.5	1080.0
152.5°	1100.5	1099.6	1098.7	1097.8	1096.9	1096.7	1097.1	1097.5	1097.9	1098.2	1098.7
155°	1127.3	1126.1	1124.9	1123.7	1122.5	1122.1	1122.5	1122.9	1123.3	1123.7	1124.3
157.5°	1148.1	1147.4	1146.7	1145.9	1145.1	1144.9	1144.9	1144.9	1145.0	1145.0	1145.7
160°	1162.5	1161.3	1160.1	1158.9	1157.7	1157.2	1157.4	1157.6	1157.8	1158.0	1158.8
162.5°	1174.0	1172.9	1171.6	1170.5	1169.2	1168.7	1168.9	1169.1	1169.3	1169.5	1170.6
165°	1189.5	1188.4	1187.1	1186.0	1184.7	1184.2	1184.5	1184.6	1184.8	1185.0	1186.2
167.5°	1201.0	1199.9	1198.6	1197.4	1196.1	1195.6	1195.8	1196.0	1196.2	1196.4	1197.8
170°	1207.6	1206.2	1204.8	1203.4	1201.9	1201.4	1201.6	1201.8	1201.9	1202.2	1203.8
172.5°	1211.9	1210.5	1209.1	1207.7	1206.3	1205.8	1206.1	1206.5	1206.8	1207.2	1208.6
175°	1216.6	1215.4	1214.2	1213.0	1211.7	1211.3	1211.5	1211.7	1211.9	1212.1	1213.7
177.5°	1218.8	1217.8	1216.8	1215.8	1215.0	1214.5	1214.7	1214.9	1215.0	1215.1	1216.3
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6



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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°	76.1	79.7	83.4	85.8	86.9	88.2	89.3	90.5
90°	78.9	83.4	87.8	90.9	92.6	94.3	95.9	97.6
92.5°	76.5	80.9	85.2	88.0	89.3	90.7	92.0	93.4
95°	72.5	76.9	81.1	83.8	84.9	86.0	87.0	88.0
97.5°	85.4	82.9	80.5	79.7	80.8	81.8	82.8	83.8
100°	146.9	120.2	93.5	80.2	80.3	80.4	80.5	80.6
102.5°	236.2	233.5	231.0	223.3	210.5	197.9	185.1	172.4
105°	312.0	315.0	318.1	320.0	320.8	321.7	322.5	323.4
107.5°	380.2	383.3	386.3	388.0	388.3	388.6	389.0	389.3
110°	424.2	426.4	428.6	430.4	431.7	432.9	434.2	435.4



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CATALOG NUMBER: S125DIW-S610D1050U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	467.6	469.6	471.5	473.0	473.7	474.5	475.3	476.0
115°	533.5	535.4	537.3	538.1	537.8	537.5	537.2	536.9
117.5°	596.7	598.2	599.8	600.7	601.3	601.7	602.3	602.8
120°	637.7	639.8	642.0	643.0	642.9	642.8	642.7	642.7
122.5°	676.4	678.4	680.5	681.4	681.1	680.8	680.6	680.3
125°	733.1	734.7	736.3	737.2	737.3	737.4	737.6	737.8
127.5°	784.4	786.2	788.0	788.5	788.0	787.4	786.8	786.1
130°	818.3	819.8	821.4	822.0	821.7	821.4	821.2	820.9
132.5°	849.5	851.6	853.5	854.3	854.0	853.6	853.3	852.8
135°	895.0	896.6	898.1	898.8	898.3	897.9	897.3	896.9
137.5°	938.0	939.8	941.6	942.4	941.9	941.5	941.0	940.6
140°	964.1	966.2	968.2	969.0	968.4	967.8	967.1	966.6
142.5°	990.1	991.6	993.1	993.5	992.9	992.3	991.7	991.1
145°	1027.3	1028.2	1029.2	1029.4	1028.8	1028.2	1027.6	1027.0
147.5°	1059.5	1060.1	1060.5	1060.2	1059.0	1057.8	1056.7	1055.5
150°	1080.3	1080.8	1081.1	1080.6	1079.1	1077.7	1076.2	1074.8
152.5°	1099.0	1099.5	1099.8	1099.4	1098.0	1096.5	1095.1	1093.7
155°	1124.9	1125.5	1126.1	1125.6	1124.0	1122.4	1120.8	1119.2
157.5°	1146.3	1146.9	1147.5	1147.1	1145.5	1143.9	1142.3	1140.7
160°	1159.6	1160.4	1161.2	1160.7	1159.2	1157.6	1156.0	1154.4
162.5°	1171.8	1172.9	1174.0	1173.7	1171.9	1170.2	1168.4	1166.6
165°	1187.4	1188.7	1189.8	1189.6	1188.0	1186.4	1184.8	1183.2
167.5°	1199.3	1200.7	1202.2	1202.0	1200.2	1198.4	1196.6	1194.8
170°	1205.4	1207.0	1208.6	1208.4	1206.7	1204.9	1203.1	1201.2
172.5°	1210.1	1211.6	1213.0	1212.8	1211.0	1209.2	1207.4	1205.6
175°	1215.3	1216.9	1218.5	1218.4	1216.6	1214.8	1213.0	1211.2
177.5°	1217.4	1218.5	1219.7	1219.6	1218.3	1217.0	1215.8	1214.4
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6

(END OF REPORT)