

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: P333439-930

Luminaire Tested: **S125DIW-S1090D770U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333439-930
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-S1090D770U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5649.0 lumens
Efficiency: N/A
Efficacy: 105.4 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: General Diffuse

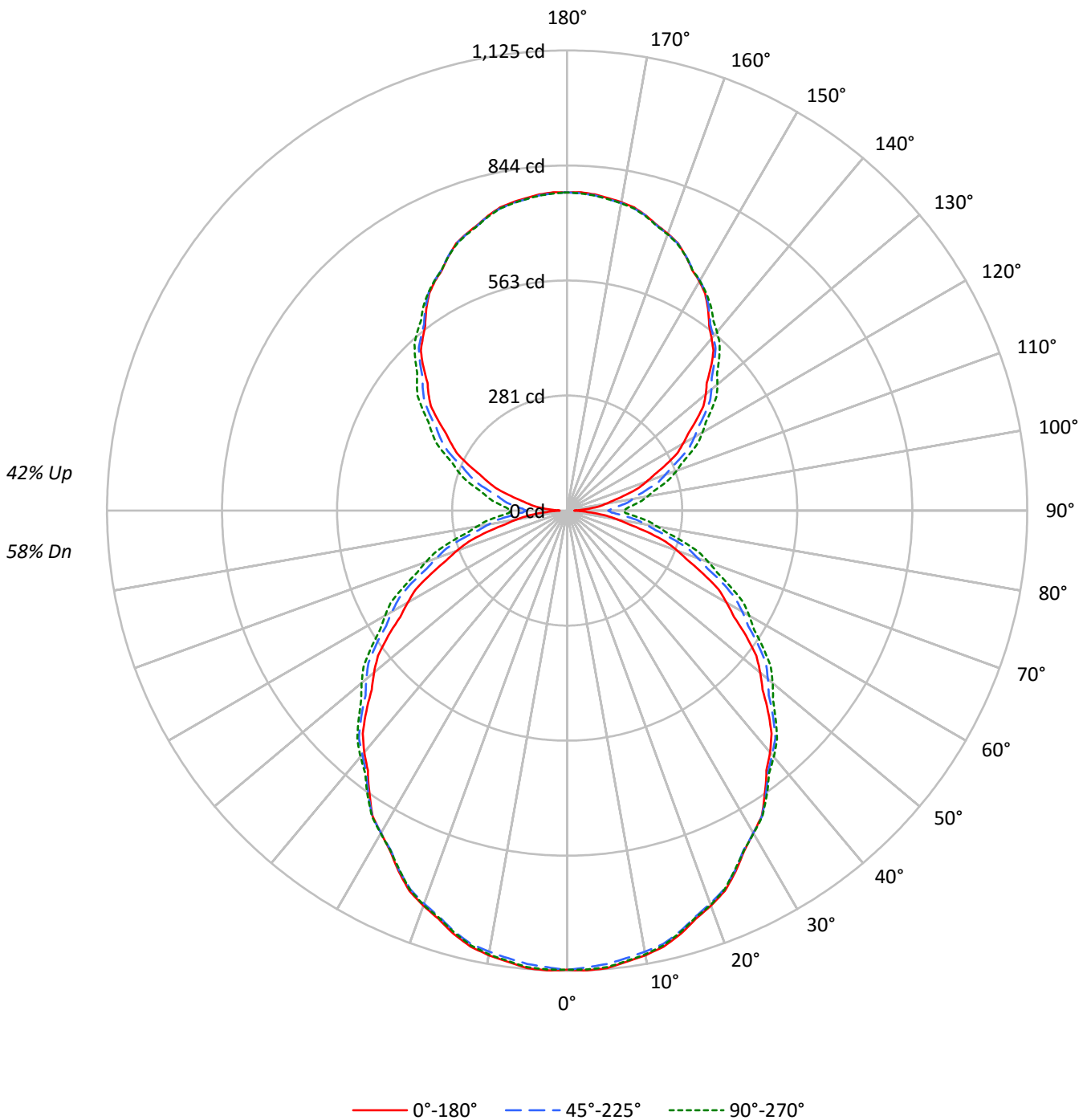
Input Watts (W): 53.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	27
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	33	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7251	7251	7251
5°	7265	7116	7139
10°	7213	6989	6979
15°	7128	6837	6775
20°	7012	6650	6572
25°	6874	6448	6320
30°	6707	6226	6092
35°	6552	6023	5884
40°	6393	5809	5674
45°	6214	5626	5487
50°	6043	5427	5322
55°	5837	5239	5128
60°	5611	5024	4931
65°	5377	4800	4709
70°	5112	4494	4480
75°	4688	4200	4198
80°	4134	3842	3893
85°	3621	3600	3798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	1.9
10°-20°	301.3	5.3
20°-30°	448.2	7.9
30°-40°	530.9	9.4
40°-50°	548.9	9.7
50°-60°	505.6	9.0
60°-70°	408.7	7.2
70°-80°	273.7	4.8
80°-90°	143.6	2.5
90°-100°	131.7	2.3
100°-110°	212.6	3.8
110°-120°	299.9	5.3
120°-130°	365.2	6.5
130°-140°	394.0	7.0
140°-150°	378.5	6.7
150°-160°	316.3	5.6
160°-170°	210.2	3.7
170°-180°	73.6	1.3
0°-30°	855.7	15.1
0°-40°	1386.5	24.5
0°-60°	2441.0	43.2
0°-90°	3267.0	57.8
90°-120°	644.2	11.4
90°-150°	1781.9	31.5
90°-180°	2382.0	42.2
0°-180°	5649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1123	1120	1113	1121	1120	106
15°	1072	1073	1065	1071	1068	302
25°	974	977	971	975	970	448
35°	843	850	848	851	851	527
45°	694	706	712	719	721	536
55°	534	551	569	581	586	477
65°	368	393	419	435	440	365
75°	202	232	266	287	294	215
85°	60	97	135	159	168	64
90°	18	58	100	127	138	14
95°	54	84	127	154	164	53
105°	148	169	205	230	240	158
115°	268	279	307	326	333	264
125°	385	389	410	426	432	345
135°	497	500	508	522	526	383
145°	601	602	604	609	612	375
155°	686	686	687	689	686	316
165°	746	745	746	748	744	210
175°	776	774	774	777	773	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1125.3	1124.9	1124.5	1124.1	1123.7	1122.8	1121.4	1120.1	1118.8	1117.4	1118.8
5°	1122.7	1122.2	1121.7	1121.2	1120.7	1119.6	1117.9	1116.1	1114.4	1112.7	1114.7
7.5°	1112.7	1112.6	1112.3	1112.1	1112.0	1111.0	1109.2	1107.4	1105.7	1103.9	1105.6
10°	1103.9	1103.9	1103.9	1103.9	1103.9	1102.9	1101.0	1099.0	1097.1	1095.1	1096.8
12.5°	1091.6	1091.8	1092.0	1092.2	1092.4	1091.7	1090.1	1088.6	1087.0	1085.4	1086.8
15°	1072.0	1072.3	1072.5	1072.8	1073.0	1072.3	1070.6	1068.9	1067.1	1065.4	1066.9
17.5°	1046.4	1046.9	1047.4	1047.9	1048.4	1047.8	1046.1	1044.4	1042.7	1041.0	1042.1
20°	1028.0	1028.5	1029.0	1029.5	1030.0	1029.3	1027.6	1025.9	1024.2	1022.5	1023.2
22.5°	1006.8	1007.7	1008.6	1009.5	1010.4	1009.8	1008.0	1006.1	1004.1	1002.2	1003.1
25°	974.0	974.8	975.5	976.2	977.0	976.6	975.2	973.7	972.2	970.8	971.8
27.5°	937.5	938.6	939.6	940.8	941.8	941.5	939.9	938.2	936.5	934.9	935.6
30°	910.2	911.7	913.1	914.6	916.1	916.1	914.6	913.1	911.7	910.2	910.7
32.5°	885.6	886.8	888.1	889.4	890.6	890.7	889.7	888.6	887.5	886.5	887.0
35°	843.1	844.8	846.5	848.2	849.9	850.4	849.7	849.0	848.2	847.5	848.2
37.5°	800.6	802.2	803.7	805.3	806.8	807.6	807.3	807.1	806.8	806.6	807.6
40°	771.5	773.5	775.4	777.4	779.3	780.2	780.0	779.8	779.5	779.3	780.2
42.5°	739.8	742.4	744.9	747.5	750.0	751.5	752.1	752.6	753.2	753.7	754.9
45°	694.5	697.2	699.9	702.5	705.2	707.2	708.4	709.6	710.9	712.1	713.8
47.5°	648.1	650.5	653.1	655.5	658.0	660.3	662.4	664.6	666.7	668.7	671.2
50°	616.4	619.1	621.7	624.4	627.1	629.8	632.5	635.2	637.9	640.6	643.3
52.5°	582.9	586.2	589.5	592.7	596.0	599.2	602.6	605.8	609.1	612.4	615.3
55°	533.8	537.7	541.6	545.5	549.4	553.3	557.3	561.2	565.1	569.0	571.7
57.5°	483.6	488.3	493.0	497.7	502.4	507.0	511.5	516.0	520.5	525.0	528.1
60°	450.1	455.0	459.9	464.8	469.7	474.6	479.5	484.4	489.3	494.2	497.8
62.5°	417.6	422.5	427.4	432.3	437.2	442.2	447.5	452.8	458.1	463.3	467.4
65°	367.6	373.2	378.9	384.5	390.1	395.8	401.7	407.6	413.4	419.3	423.0
67.5°	320.5	326.0	331.3	336.8	342.2	347.9	353.9	359.9	365.8	371.8	376.3
70°	286.2	291.8	297.4	303.0	308.7	314.6	321.0	327.3	333.7	340.1	344.7
72.5°	252.7	258.5	264.3	270.2	276.0	282.3	289.3	296.3	303.2	310.1	315.2
75°	202.5	208.9	215.2	221.6	228.0	235.1	242.9	250.7	258.5	266.4	271.3
77.5°	154.3	161.7	169.0	176.3	183.7	191.1	198.6	206.2	213.7	221.2	226.6
80°	124.3	131.7	139.0	146.3	153.7	161.5	169.8	178.1	186.5	194.8	200.2
82.5°	97.1	104.8	112.5	120.3	128.0	136.1	144.6	153.1	161.7	170.2	175.4
85°	60.5	68.6	76.6	84.7	92.8	101.1	109.7	118.2	126.8	135.3	140.7
87.5°	34.5	42.5	50.5	58.6	66.6	74.9	83.4	91.9	100.4	108.9	114.7
90°	18.2	27.1	36.0	44.9	53.8	62.9	72.2	81.4	90.7	100.0	106.2
92.5°	30.5	38.5	46.5	54.5	62.5	71.3	81.0	90.7	100.3	110.0	116.3
95°	53.6	60.3	66.9	73.5	80.1	88.3	98.0	107.6	117.3	126.9	133.3
97.5°	78.4	84.2	90.0	95.9	101.7	109.5	119.4	129.3	139.2	149.0	155.1
100°	96.9	102.0	107.1	112.3	117.4	124.7	134.3	143.9	153.4	163.1	169.4
102.5°	116.8	122.1	127.3	132.6	137.9	144.8	153.4	161.8	170.4	178.9	185.2
105°	147.9	152.5	157.1	161.7	166.2	172.6	180.8	188.9	197.1	205.2	210.9
107.5°	182.4	186.4	190.4	194.4	198.4	204.2	211.9	219.6	227.2	234.9	240.1
110°	206.2	209.9	213.4	217.0	220.6	226.1	233.3	240.6	247.9	255.1	260.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	231.4	234.1	236.8	239.5	242.2	247.1	254.3	261.5	268.6	275.8	280.4
115°	267.5	269.7	272.0	274.2	276.5	280.9	287.6	294.2	300.8	307.4	311.7
117.5°	303.6	305.0	306.4	307.8	309.1	312.9	319.2	325.5	331.7	337.9	342.3
120°	326.9	328.3	329.7	331.1	332.5	336.1	341.9	347.6	353.4	359.1	363.3
122.5°	351.1	351.8	352.4	352.9	353.5	356.7	362.5	368.3	374.1	379.8	383.7
125°	385.1	385.6	386.2	386.8	387.3	390.1	395.2	400.2	405.2	410.3	413.9
127.5°	420.3	420.5	420.7	420.9	421.2	423.4	427.5	431.7	435.9	440.0	443.5
130°	442.1	442.5	443.0	443.4	443.8	445.9	449.6	453.2	457.0	460.6	463.9
132.5°	463.0	464.1	465.1	466.2	467.2	469.0	471.7	474.2	476.8	479.4	482.7
135°	497.3	497.8	498.4	499.0	499.5	500.8	502.6	504.4	506.3	508.1	511.3
137.5°	529.5	530.1	530.7	531.2	531.8	532.7	533.9	534.9	536.1	537.2	540.2
140°	549.4	550.1	550.8	551.5	552.1	552.8	553.4	554.1	554.7	555.4	558.3
142.5°	570.3	570.6	571.0	571.4	571.8	572.2	572.7	573.3	573.9	574.5	576.9
145°	600.9	601.2	601.4	601.8	602.1	602.4	602.8	603.2	603.6	604.1	605.3
147.5°	628.1	628.4	628.7	629.0	629.3	629.6	629.9	630.2	630.6	630.9	631.6
150°	647.0	646.9	646.7	646.6	646.5	646.7	647.2	647.8	648.2	648.8	648.8
152.5°	662.5	662.7	662.8	663.1	663.2	663.4	663.7	663.9	664.1	664.3	664.6
155°	686.3	686.3	686.3	686.3	686.3	686.4	686.6	686.6	686.8	687.0	687.5
157.5°	707.7	707.4	707.0	706.8	706.5	706.4	706.5	706.6	706.8	706.9	707.4
160°	720.2	719.8	719.4	719.0	718.6	718.4	718.6	718.8	718.8	719.0	719.6
162.5°	731.4	731.1	730.8	730.5	730.2	730.0	730.1	730.1	730.1	730.2	730.8
165°	746.2	746.0	745.8	745.4	745.2	745.1	745.3	745.3	745.5	745.7	746.2
167.5°	758.9	758.3	757.7	757.2	756.7	756.4	756.4	756.4	756.4	756.4	757.2
170°	765.6	765.1	764.5	764.0	763.4	763.2	763.2	763.2	763.2	763.2	764.0
172.5°	770.5	769.9	769.4	768.8	768.3	768.0	768.0	768.0	768.0	768.0	768.8
175°	775.9	775.3	774.9	774.3	773.7	773.5	773.5	773.5	773.5	773.5	774.3
177.5°	778.7	778.3	777.8	777.4	777.0	776.7	776.6	776.5	776.4	776.2	776.9
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1120.1	1121.4	1122.8	1123.4	1123.2	1123.0	1122.8	1122.7
5°	1116.6	1118.6	1120.5	1121.4	1121.2	1121.0	1120.7	1120.5
7.5°	1107.3	1109.1	1110.8	1111.5	1111.3	1111.0	1110.8	1110.5
10°	1098.5	1100.2	1102.0	1102.7	1102.4	1102.2	1102.0	1101.7
12.5°	1088.1	1089.4	1090.7	1091.0	1090.5	1089.8	1089.2	1088.5
15°	1068.4	1069.8	1071.3	1071.5	1070.6	1069.6	1068.6	1067.6
17.5°	1043.3	1044.3	1045.5	1045.7	1045.1	1044.6	1044.0	1043.4
20°	1023.9	1024.7	1025.4	1025.8	1025.8	1025.8	1025.8	1025.8
22.5°	1004.1	1005.0	1005.9	1006.1	1005.5	1004.9	1004.4	1003.8
25°	972.7	973.7	974.7	974.5	973.3	972.1	970.9	969.6
27.5°	936.2	936.9	937.6	937.8	937.3	936.9	936.4	936.0
30°	911.2	911.7	912.2	912.3	912.1	911.8	911.6	911.3
32.5°	887.5	887.9	888.4	888.5	888.3	888.0	887.8	887.5
35°	849.0	849.7	850.4	850.8	850.8	850.8	850.8	850.8
37.5°	808.5	809.5	810.5	810.9	810.8	810.7	810.6	810.5
40°	781.2	782.2	783.2	783.9	784.4	784.9	785.4	785.9
42.5°	756.0	757.2	758.4	759.0	759.1	759.2	759.4	759.5
45°	715.5	717.2	718.9	719.9	720.2	720.4	720.6	720.9
47.5°	673.8	676.2	678.7	680.2	680.8	681.3	681.8	682.4
50°	646.0	648.7	651.3	653.1	653.8	654.5	655.3	656.0
52.5°	618.2	621.0	623.9	625.7	626.1	626.7	627.3	627.8
55°	574.4	577.1	579.8	581.6	582.6	583.6	584.6	585.5
57.5°	531.2	534.3	537.4	539.2	540.0	540.7	541.4	542.2
60°	501.5	505.2	508.8	511.0	511.8	512.5	513.2	514.0
62.5°	471.5	475.6	479.6	482.1	483.1	484.0	484.9	485.8
65°	426.6	430.3	434.0	436.3	437.3	438.3	439.3	440.3
67.5°	380.7	385.1	389.6	392.5	393.7	395.0	396.2	397.5
70°	349.4	354.0	358.7	361.7	363.2	364.7	366.2	367.6
72.5°	320.2	325.3	330.3	333.4	334.4	335.5	336.6	337.7
75°	276.1	281.0	285.9	288.9	290.2	291.4	292.6	293.8
77.5°	232.0	237.3	242.7	245.9	246.9	247.9	248.8	249.8
80°	205.5	210.9	216.3	219.5	220.5	221.4	222.4	223.4
82.5°	180.5	185.7	190.9	194.4	196.2	197.9	199.7	201.4
85°	146.1	151.5	156.9	160.5	162.5	164.4	166.4	168.4
87.5°	120.4	126.2	132.0	135.7	137.5	139.3	141.1	142.9
90°	112.5	118.8	125.1	129.3	131.4	133.5	135.7	137.8
92.5°	122.6	128.9	135.3	139.4	141.4	143.4	145.4	147.4
95°	139.6	145.9	152.2	156.4	158.3	160.4	162.3	164.3
97.5°	161.1	167.1	173.2	177.1	178.9	180.8	182.5	184.3
100°	175.7	182.1	188.4	192.5	194.2	195.9	197.7	199.4
102.5°	191.4	197.6	203.9	208.0	209.8	211.7	213.5	215.3
105°	216.5	222.3	228.0	231.9	234.0	236.1	238.2	240.4
107.5°	245.4	250.6	255.8	259.3	260.7	262.2	263.7	265.2
110°	265.2	270.3	275.3	278.6	280.2	281.8	283.3	284.9



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CATALOG NUMBER: S125DIW-S1090D770U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	285.0	289.7	294.3	297.4	298.9	300.4	301.8	303.3
115°	315.9	320.2	324.5	327.3	328.6	330.0	331.3	332.6
117.5°	346.5	350.7	355.0	357.8	358.8	360.0	361.1	362.2
120°	367.5	371.6	375.8	378.3	379.2	380.2	381.1	382.0
122.5°	387.5	391.3	395.3	397.7	398.7	399.7	400.8	401.9
125°	417.5	421.2	424.9	427.2	428.3	429.3	430.5	431.5
127.5°	447.0	450.5	454.0	456.3	457.5	458.6	459.7	460.9
130°	467.2	470.5	473.8	475.9	476.9	477.8	478.7	479.7
132.5°	486.0	489.3	492.5	494.6	495.2	495.8	496.4	497.1
135°	514.5	517.6	520.8	522.8	523.4	524.2	524.8	525.5
137.5°	543.3	546.3	549.4	551.1	551.4	551.7	552.0	552.3
140°	561.3	564.3	567.2	568.8	569.2	569.5	569.8	570.1
142.5°	579.4	581.8	584.3	585.7	586.0	586.3	586.6	586.9
145°	606.5	607.7	608.9	609.8	610.4	611.0	611.6	612.1
147.5°	632.3	633.1	633.7	633.9	633.4	632.9	632.4	631.9
150°	648.8	648.8	648.8	648.8	648.8	648.7	648.7	648.7
152.5°	665.0	665.3	665.6	665.5	665.1	664.6	664.2	663.8
155°	688.0	688.5	689.1	689.0	688.4	687.7	687.0	686.3
157.5°	708.0	708.5	709.1	708.9	708.0	707.1	706.2	705.3
160°	720.1	720.6	721.1	721.1	720.4	719.7	719.1	718.4
162.5°	731.5	732.1	732.7	732.7	731.9	731.1	730.3	729.5
165°	746.7	747.3	747.8	747.6	746.9	746.1	745.3	744.4
167.5°	758.1	758.9	759.6	759.6	758.8	758.0	757.2	756.3
170°	764.8	765.6	766.5	766.4	765.4	764.5	763.5	762.6
172.5°	769.6	770.5	771.3	771.3	770.5	769.6	768.7	767.9
175°	775.1	775.9	776.7	776.7	775.7	774.8	773.8	772.9
177.5°	777.6	778.2	778.9	778.8	778.0	777.3	776.6	775.8
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7

(END OF REPORT)