

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: P333438-927

Luminaire Tested: **S125DIW-S1090D770U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333438-927
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-S1090D770U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5811.8 lumens
Efficiency: N/A
Efficacy: 108.4 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

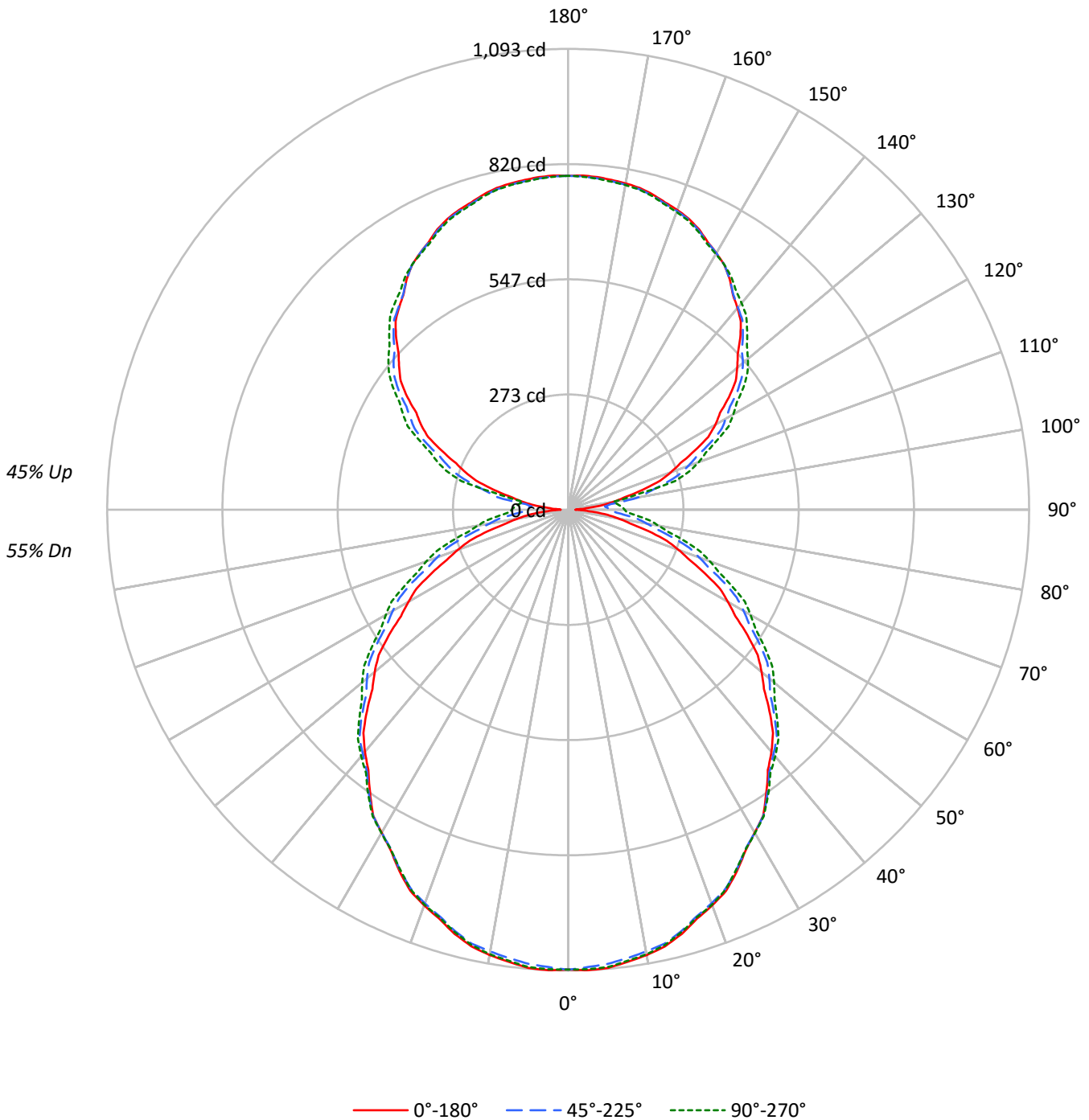
Input Watts (W): 53.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333438-927

CATALOG NUMBER: S125DIW-S1090D770U927-4F0-1E-UDD-D

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	93	89	85	91	87	83	80	74	71	69	63	61	59	52	51	49	44
2	89	81	74	69	82	75	70	65	64	60	56	55	51	49	45	43	41	36
3	81	71	63	57	75	66	59	54	57	51	47	48	44	41	40	37	35	31
4	74	63	54	48	68	58	51	45	50	44	40	43	38	35	36	32	30	26
5	68	56	47	41	63	52	44	39	45	39	34	38	34	30	32	28	26	22
6	62	50	42	36	58	47	39	34	40	34	30	34	30	26	29	25	22	20
7	58	45	37	31	53	42	35	29	37	31	26	31	27	23	26	23	20	17
8	54	41	33	27	50	38	31	26	33	27	23	29	24	21	24	21	18	15
9	50	37	30	24	46	35	28	23	31	25	21	26	22	18	22	19	16	14
10	47	34	27	22	43	32	25	21	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.8
10°-20°	292.8	5.0
20°-30°	435.5	7.5
30°-40°	515.8	8.9
40°-50°	533.3	9.2
50°-60°	491.3	8.5
60°-70°	397.1	6.8
70°-80°	265.9	4.6
80°-90°	139.6	2.4
90°-100°	106.2	1.8
100°-110°	234.4	4.0
110°-120°	359.9	6.2
120°-130°	434.5	7.5
130°-140°	453.5	7.8
140°-150°	418.7	7.2
150°-160°	337.1	5.8
160°-170°	218.0	3.8
170°-180°	75.2	1.3
0°-30°	831.4	14.3
0°-40°	1347.2	23.2
0°-60°	2371.8	40.8
0°-90°	3174.4	54.6
90°-120°	700.5	12.1
90°-150°	2007.1	34.5
90°-180°	2637.0	45.4
0°-180°	5811.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	18	57	97	124	134	13
95°	47	73	88	113	121	54
105°	182	202	234	254	262	193
115°	330	342	369	385	389	327
125°	465	469	490	504	508	415
135°	577	580	586	598	600	444
145°	667	667	667	673	674	417
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



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CATALOG NUMBER: S125DIW-S1090D770U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.5	41.3	49.1	57.0	64.7	72.8	81.0	89.3	97.6	105.8	111.5
90°	17.7	26.4	35.0	43.6	52.3	61.1	70.1	79.1	88.1	97.1	103.2
92.5°	24.5	30.7	37.1	43.3	49.7	57.4	66.5	75.5	84.6	93.6	99.6
95°	47.4	53.2	58.9	64.7	70.5	74.9	78.1	81.2	84.4	87.5	93.3
97.5°	82.5	88.7	95.0	101.2	107.5	109.6	107.7	105.6	103.6	101.6	102.9
100°	109.8	115.2	120.6	126.0	131.3	138.1	146.2	154.3	162.5	170.6	156.1
102.5°	137.6	142.7	147.8	152.9	158.0	164.5	172.1	179.9	187.6	195.4	196.5
105°	182.2	186.6	190.8	195.2	199.5	205.3	212.4	219.5	226.6	233.8	238.5
107.5°	228.5	231.8	235.0	238.3	241.5	246.7	253.8	260.9	268.0	275.1	279.8
110°	258.7	261.6	264.4	267.3	270.1	275.0	281.9	288.8	295.7	302.7	306.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	287.8	290.4	293.0	295.6	298.2	302.9	309.4	316.1	322.7	329.3	333.1
115°	330.4	332.7	335.1	337.4	339.7	344.0	350.3	356.6	362.9	369.2	373.0
117.5°	374.5	375.7	376.7	377.8	378.8	382.5	388.9	395.2	401.6	407.9	411.2
120°	402.7	403.3	403.9	404.5	405.0	408.3	414.2	420.0	425.9	431.7	435.5
122.5°	426.7	427.6	428.4	429.3	430.1	433.2	438.7	444.2	449.6	455.0	458.7
125°	465.1	465.7	466.4	467.1	467.8	470.5	475.2	480.0	484.7	489.5	492.7
127.5°	500.7	501.1	501.5	502.0	502.4	504.5	508.3	512.1	515.9	519.8	523.0
130°	523.2	523.7	524.1	524.5	524.9	526.9	530.3	533.8	537.3	540.7	543.6
132.5°	544.9	545.7	546.4	547.1	547.8	549.3	551.6	553.8	556.1	558.4	561.7
135°	576.8	577.3	577.9	578.5	579.0	580.0	581.4	582.7	584.2	585.6	588.4
137.5°	606.0	606.5	607.0	607.5	608.0	608.6	609.1	609.7	610.2	610.9	613.7
140°	624.5	624.7	625.0	625.2	625.5	625.7	625.7	625.9	626.0	626.1	629.0
142.5°	641.8	641.7	641.7	641.7	641.7	641.7	642.0	642.2	642.5	642.7	645.0
145°	667.3	667.3	667.3	667.3	667.4	667.4	667.4	667.4	667.4	667.4	668.7
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.5
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	117.0	122.6	128.2	131.9	133.6	135.4	137.1	138.9
90°	109.3	115.4	121.5	125.6	127.7	129.8	131.8	133.9
92.5°	105.5	111.5	117.4	121.3	123.1	124.9	126.8	128.7
95°	99.2	105.1	111.0	114.8	116.5	118.1	119.8	121.4
97.5°	104.3	105.5	106.9	108.3	110.0	111.5	113.1	114.8
100°	141.7	127.2	112.8	106.0	106.9	107.8	108.8	109.6
102.5°	197.6	198.7	199.8	196.6	189.3	181.8	174.4	166.9
105°	243.3	248.0	252.8	255.9	257.5	259.0	260.5	262.1
107.5°	284.6	289.3	294.1	296.9	298.0	299.1	300.2	301.3
110°	310.9	315.1	319.2	322.1	323.9	325.7	327.5	329.3



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CATALOG NUMBER: S125DIW-S1090D770U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	336.9	340.8	344.6	347.3	348.7	350.2	351.7	353.2
115°	376.8	380.5	384.3	386.4	387.1	387.8	388.4	389.0
117.5°	414.6	418.0	421.4	423.7	424.9	426.2	427.5	428.8
120°	439.3	443.1	446.8	449.1	449.9	450.7	451.4	452.2
122.5°	462.2	465.8	469.4	471.5	472.2	472.9	473.6	474.2
125°	496.1	499.3	502.6	504.6	505.4	506.2	507.0	507.9
127.5°	526.2	529.5	532.7	534.6	535.0	535.4	535.8	536.1
130°	546.6	549.5	552.5	554.2	554.7	555.2	555.8	556.3
132.5°	564.9	568.2	571.4	573.2	573.5	573.9	574.3	574.6
135°	591.2	594.1	596.8	598.5	598.9	599.3	599.7	600.1
137.5°	616.6	619.4	622.3	623.8	624.1	624.3	624.6	624.9
140°	631.8	634.7	637.6	639.1	639.3	639.4	639.6	639.8
142.5°	647.3	649.6	651.8	653.1	653.2	653.4	653.6	653.7
145°	670.0	671.4	672.6	673.4	673.6	673.8	673.9	674.1
147.5°	690.1	690.6	691.2	691.2	690.6	690.1	689.6	689.1
150°	703.1	703.4	703.7	703.4	702.6	701.8	701.0	700.1
152.5°	715.3	715.6	715.9	715.6	714.6	713.8	712.9	712.0
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

(END OF REPORT)