

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: P333573-930

Luminaire Tested: **S125RDIP-S850D1035U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333573-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S850D1035U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5678.1 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

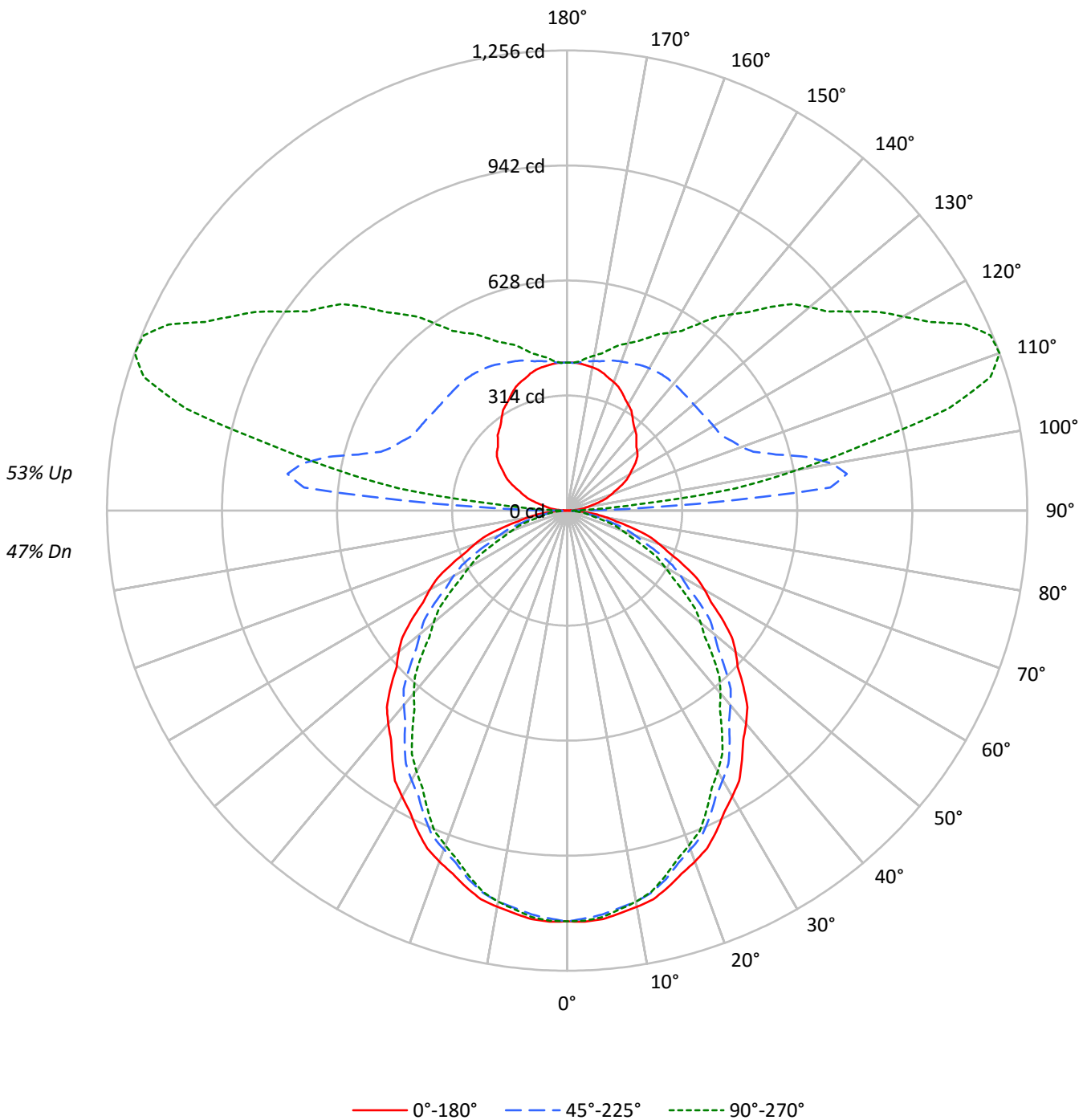
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33
4	74	64	56	50	68	59	52	47	50	45	40	41	37	34	33	31	28
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	35	29	24	30	25	21	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7240	7240	7240
5°	7257	7175	7219
10°	7202	7108	7108
15°	7117	6964	6907
20°	7007	6762	6681
25°	6879	6565	6420
30°	6718	6334	6131
35°	6556	6095	5807
40°	6403	5847	5490
45°	6218	5569	5142
50°	6031	5267	4782
55°	5816	4977	4396
60°	5599	4627	3981
65°	5344	4219	3506
70°	5053	3709	3021
75°	4649	3127	2515
80°	4095	2455	2109
85°	3453	2008	1882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	1.9
10°-20°	294.6	5.2
20°-30°	427.2	7.5
30°-40°	486.9	8.6
40°-50°	474.6	8.4
50°-60°	399.5	7.0
60°-70°	280.0	4.9
70°-80°	143.9	2.5
80°-90°	38.6	0.7
90°-100°	292.6	5.2
100°-110°	629.0	11.1
110°-120°	590.3	10.4
120°-130°	478.4	8.4
130°-140°	383.9	6.8
140°-150°	289.7	5.1
150°-160°	203.9	3.6
160°-170°	120.2	2.1
170°-180°	39.1	0.7
0°-30°	827.2	14.6
0°-40°	1314.1	23.1
0°-60°	2188.2	38.5
0°-90°	2650.8	46.7
90°-120°	1512.0	26.6
90°-150°	2664.1	46.9
90°-180°	3027.0	53.3
0°-180°	5678.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1119	1116	1107	1115	1114	106
15°	1064	1059	1042	1040	1033	300
25°	965	952	921	910	901	444
35°	832	810	773	749	737	520
45°	681	655	610	577	563	525
55°	516	488	442	405	390	462
65°	350	320	276	243	229	346
75°	186	160	125	107	101	197
85°	47	32	27	26	25	52
90°	1	7	13	17	19	4
95°	27	79	721	327	191	29
105°	92	129	590	1162	1078	97
115°	164	198	474	1021	1201	162
125°	228	267	454	812	947	202
135°	267	321	451	681	786	207
145°	311	356	452	564	620	195
155°	355	382	441	499	520	163
165°	387	398	423	449	456	109
175°	403	403	406	411	409	38
180°	404	404	404	404	404	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1123.1	1122.7	1122.2	1121.8	1121.3	1120.3	1118.8	1117.3	1115.8	1114.3	1115.8
5°	1119.4	1118.7	1117.9	1117.1	1116.4	1115.0	1112.9	1110.8	1108.7	1106.7	1108.6
7.5°	1108.4	1107.7	1106.9	1106.2	1105.5	1103.9	1101.5	1098.9	1096.5	1094.0	1095.3
10°	1098.2	1097.6	1097.1	1096.5	1095.9	1094.4	1091.8	1089.1	1086.5	1083.9	1084.3
12.5°	1086.7	1086.0	1085.2	1084.6	1083.9	1081.7	1078.2	1074.6	1071.1	1067.6	1068.0
15°	1064.4	1063.2	1062.1	1060.9	1059.8	1057.3	1053.4	1049.4	1045.5	1041.5	1041.3
17.5°	1039.1	1037.4	1035.7	1034.0	1032.2	1028.8	1023.9	1018.9	1013.9	1008.9	1008.0
20°	1019.5	1017.6	1015.7	1013.8	1011.9	1008.0	1002.0	996.0	989.9	983.9	983.0
22.5°	997.8	995.9	994.0	992.1	990.3	986.2	979.8	973.5	967.2	960.9	959.0
25°	965.3	962.5	959.6	956.8	954.0	949.1	942.2	935.1	928.2	921.3	918.8
27.5°	928.1	924.6	921.2	917.8	914.4	908.9	901.5	894.0	886.6	879.1	875.6
30°	900.9	897.3	893.8	890.2	886.6	880.8	873.0	865.1	857.2	849.3	845.0
32.5°	874.5	870.3	866.2	862.0	857.8	851.7	843.7	835.6	827.5	819.5	814.7
35°	831.5	827.0	822.5	817.9	813.4	806.9	798.5	790.0	781.5	773.1	767.6
37.5°	789.3	783.8	778.4	772.8	767.4	760.3	751.5	742.7	734.0	725.3	718.8
40°	759.5	753.9	748.2	742.6	736.9	729.6	720.6	711.5	702.5	693.5	686.3
42.5°	728.4	722.6	716.8	710.9	705.2	697.7	688.3	679.0	669.6	660.3	653.5
45°	680.8	675.3	669.8	664.4	658.9	651.0	640.7	630.4	620.0	609.7	602.1
47.5°	631.5	625.7	620.0	614.2	608.5	600.4	590.0	579.5	569.1	558.6	550.9
50°	600.3	594.1	587.9	581.7	575.5	567.0	556.3	545.6	534.8	524.2	516.2
52.5°	566.5	560.1	553.8	547.4	541.0	532.8	522.7	512.6	502.4	492.3	483.8
55°	516.5	510.5	504.5	498.5	492.4	484.1	473.6	463.1	452.6	442.0	433.5
57.5°	466.0	459.6	453.1	446.7	440.3	432.0	421.8	411.6	401.5	391.3	383.1
60°	433.5	427.0	420.4	413.8	407.2	398.8	388.7	378.5	368.4	358.2	349.9
62.5°	399.0	392.7	386.5	380.1	373.8	365.6	355.2	345.0	334.6	324.3	316.7
65°	349.7	343.3	336.9	330.5	324.1	315.9	306.0	296.0	286.0	276.1	268.5
67.5°	300.8	294.3	288.0	281.6	275.2	267.2	257.6	248.1	238.6	228.9	222.1
70°	267.6	261.1	254.8	248.3	242.0	234.1	224.7	215.2	205.9	196.4	190.6
72.5°	235.1	228.8	222.6	216.3	210.1	202.5	193.7	184.9	176.1	167.3	161.9
75°	186.3	180.7	175.0	169.3	163.7	156.9	149.0	141.1	133.2	125.3	121.2
77.5°	137.9	133.3	128.8	124.3	119.8	114.4	108.0	101.7	95.4	89.1	86.2
80°	110.1	105.6	101.0	96.5	92.0	87.2	81.9	76.6	71.3	66.0	64.3
82.5°	83.0	78.9	74.8	70.8	66.7	62.9	59.3	55.7	52.0	48.4	47.6
85°	46.6	43.2	39.8	36.4	33.0	30.8	29.9	28.9	28.0	27.1	26.9
87.5°	15.7	14.8	14.1	13.4	12.6	12.4	12.4	12.6	12.6	12.8	13.0
90°	0.8	1.6	3.3	4.9	6.5	8.2	9.0	10.6	11.4	13.0	13.9
92.5°	9.9	12.1	18.9	28.9	43.0	66.8	111.2	185.7	266.6	262.4	212.4
95°	26.8	27.6	34.2	43.1	61.1	97.7	184.7	363.8	588.5	721.1	705.6
97.5°	44.6	45.6	50.1	59.1	75.2	101.6	159.2	290.4	525.5	770.1	892.8
100°	57.0	58.6	61.9	70.8	86.3	110.7	157.9	263.7	468.8	734.9	938.4
102.5°	70.7	71.6	74.2	83.8	98.0	121.7	163.8	252.7	425.8	673.1	911.1
105°	92.0	92.0	96.0	104.2	117.2	140.0	175.8	248.3	384.2	590.0	823.7
107.5°	112.8	114.5	118.3	125.0	138.5	159.1	193.7	255.8	366.6	533.0	734.4
110°	127.8	129.4	132.6	140.0	152.2	173.3	206.8	262.9	361.3	506.2	683.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.8	144.4	147.0	154.3	166.5	187.0	219.1	272.0	361.3	490.6	645.9
115°	164.4	166.0	168.4	175.8	188.0	208.4	238.5	285.7	363.8	473.7	604.7
117.5°	183.9	186.4	189.0	196.3	210.2	229.8	258.4	301.3	369.2	465.4	580.2
120°	197.0	199.4	202.7	210.0	223.8	244.2	272.6	311.7	374.4	461.5	566.5
122.5°	210.7	212.4	215.0	222.3	237.5	257.9	286.3	323.4	379.0	458.2	554.7
125°	227.9	229.5	233.6	240.9	256.4	277.5	304.4	339.4	386.6	454.1	538.8
127.5°	241.4	243.9	249.1	258.4	274.8	296.0	321.8	354.0	395.3	452.2	524.2
130°	249.9	252.3	258.9	269.4	286.5	307.6	332.9	363.8	400.5	450.9	514.4
132.5°	256.4	259.4	267.3	279.2	296.9	318.0	343.3	372.3	406.3	450.9	506.5
135°	266.9	270.2	280.0	293.0	310.1	332.1	357.3	384.2	414.3	450.9	497.3
137.5°	280.3	282.7	291.9	304.9	321.6	344.3	367.2	393.0	421.6	451.8	489.0
140°	288.1	290.6	300.4	313.3	328.8	350.8	374.4	398.8	424.9	452.5	485.1
142.5°	297.3	299.1	308.1	321.1	336.0	356.6	379.0	402.0	426.8	453.1	481.8
145°	310.9	312.5	320.7	332.1	346.7	365.4	386.6	406.9	428.9	452.5	477.0
147.5°	325.2	326.2	333.2	343.8	356.4	372.9	391.5	409.9	429.7	450.4	471.9
150°	333.7	335.3	341.0	351.6	363.0	376.8	394.8	411.8	429.7	448.4	468.0
152.5°	342.8	343.8	348.9	358.1	368.8	381.4	398.0	413.1	429.1	445.9	463.4
155°	354.8	354.8	359.7	367.9	376.0	387.4	401.2	414.3	427.3	441.2	455.8
157.5°	365.6	365.4	369.3	376.3	383.5	392.2	404.0	415.1	425.2	436.3	448.6
160°	372.8	371.9	375.2	380.9	387.4	394.8	405.3	415.1	423.2	433.0	442.8
162.5°	378.6	377.8	381.1	386.1	391.3	397.4	406.6	414.4	421.3	429.1	437.6
165°	387.4	385.8	388.2	392.3	395.6	400.5	406.9	413.4	418.3	423.2	429.7
167.5°	393.3	392.5	394.0	396.2	398.5	401.5	406.9	411.5	413.8	417.5	422.1
170°	397.2	396.4	397.2	398.8	400.5	402.8	406.9	410.2	411.8	414.3	417.5
172.5°	399.8	398.4	399.2	400.7	401.7	402.8	406.3	408.9	409.2	410.3	412.9
175°	402.8	401.2	402.0	402.8	402.8	402.8	405.3	406.9	406.1	406.1	406.9
177.5°	404.3	403.0	403.0	403.7	403.0	403.0	404.3	405.0	403.7	403.7	404.3
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1117.3	1118.8	1120.3	1121.0	1120.9	1120.7	1120.5	1120.4
5°	1110.4	1112.3	1114.2	1115.0	1114.6	1114.2	1113.9	1113.5
7.5°	1096.7	1098.0	1099.3	1099.7	1099.3	1098.9	1098.5	1098.0
10°	1084.9	1085.5	1086.1	1086.1	1085.5	1084.9	1084.3	1083.9
12.5°	1068.4	1068.8	1069.2	1069.0	1068.1	1067.2	1066.4	1065.5
15°	1041.1	1040.9	1040.7	1039.8	1038.1	1036.4	1034.7	1033.0
17.5°	1007.1	1006.2	1005.2	1004.0	1002.7	1001.3	999.9	998.5
20°	982.0	981.0	980.2	978.8	977.1	975.4	973.7	972.1
22.5°	957.2	955.4	953.5	951.9	950.5	949.1	947.7	946.3
25°	916.4	914.0	911.5	909.2	907.1	905.1	903.0	900.9
27.5°	872.2	868.8	865.4	862.7	860.7	858.7	856.7	854.7
30°	840.7	836.3	831.9	829.0	827.3	825.6	823.9	822.1
32.5°	809.9	805.1	800.4	796.9	794.8	792.6	790.4	788.3
35°	762.1	756.7	751.2	747.2	744.5	741.9	739.3	736.6
37.5°	712.2	705.6	699.1	694.6	692.0	689.4	686.9	684.4
40°	679.1	672.1	664.9	660.1	657.9	655.7	653.4	651.2
42.5°	646.6	639.8	632.9	627.8	624.5	621.2	617.8	614.6
45°	594.6	587.1	579.5	574.4	571.5	568.8	565.9	563.0
47.5°	543.2	535.4	527.7	522.2	519.1	516.0	512.8	509.7
50°	508.3	500.4	492.5	487.1	484.4	481.5	478.7	475.9
52.5°	475.3	466.8	458.3	452.6	449.8	446.9	444.2	441.3
55°	425.1	416.6	408.1	402.4	399.4	396.4	393.4	390.4
57.5°	374.8	366.6	358.2	352.8	350.1	347.4	344.8	342.1
60°	341.6	333.3	325.1	319.5	316.7	313.9	311.0	308.2
62.5°	308.9	301.3	293.6	288.4	285.5	282.7	279.9	277.0
65°	261.0	253.5	245.9	240.8	237.9	235.1	232.3	229.4
67.5°	215.2	208.3	201.4	196.8	194.6	192.3	190.0	187.8
70°	184.7	179.0	173.1	169.1	166.8	164.5	162.3	160.0
72.5°	156.5	151.2	145.8	142.4	140.8	139.3	137.9	136.3
75°	117.1	112.9	108.8	106.1	104.7	103.4	102.1	100.8
77.5°	83.2	80.4	77.5	75.6	74.6	73.6	72.6	71.7
80°	62.7	61.0	59.3	58.2	57.9	57.5	57.1	56.7
82.5°	46.9	46.1	45.2	44.8	44.5	44.4	44.1	43.9
85°	26.7	26.5	26.3	26.2	25.9	25.8	25.6	25.4
87.5°	13.1	13.3	13.5	13.7	13.5	13.4	13.4	13.2
90°	14.7	15.5	16.3	17.9	17.9	17.9	18.8	18.8
92.5°	144.2	104.7	78.8	66.8	56.3	54.4	53.2	51.9
95°	585.2	461.5	361.3	293.0	235.2	210.8	204.3	191.3
97.5°	871.6	784.7	687.2	592.2	541.9	496.3	472.7	462.3
100°	1001.1	961.2	877.3	792.7	736.5	678.0	647.8	634.9
102.5°	1044.7	1069.3	1029.1	971.8	911.7	870.1	837.3	827.5
105°	1019.0	1130.5	1166.3	1157.3	1131.3	1104.5	1088.2	1078.4
107.5°	927.2	1076.0	1167.9	1210.4	1223.6	1223.4	1218.1	1211.5
110°	859.5	1014.1	1128.9	1198.1	1234.7	1250.1	1255.8	1255.8



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CATALOG NUMBER: S125RDIP-S850D1035U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	806.1	952.9	1068.9	1150.6	1204.0	1230.6	1244.8	1250.6
115°	739.0	865.2	976.6	1065.4	1128.9	1167.9	1190.7	1201.3
117.5°	695.7	804.5	900.5	981.9	1045.4	1085.7	1108.3	1114.8
120°	672.3	770.0	859.5	931.1	991.3	1030.4	1052.4	1058.9
122.5°	654.7	745.2	824.9	892.0	945.7	981.5	1003.6	1009.4
125°	629.2	712.2	782.9	841.6	887.1	920.5	938.4	946.6
127.5°	603.1	680.6	746.7	801.5	842.9	872.3	889.2	892.8
130°	586.9	658.4	721.9	774.9	815.5	842.4	858.7	863.6
132.5°	570.5	637.6	695.2	746.2	786.8	813.8	828.7	834.2
135°	549.3	605.5	657.6	704.0	739.8	766.7	781.3	786.2
137.5°	531.5	576.9	620.2	659.6	691.6	716.1	729.6	734.9
140°	521.7	559.9	597.4	631.6	661.7	682.9	695.0	699.1
142.5°	513.2	545.6	577.9	607.5	633.1	650.9	662.5	665.9
145°	502.1	527.4	552.6	574.6	594.1	608.0	616.9	620.2
147.5°	491.8	512.3	531.7	548.2	563.7	574.8	580.0	581.5
150°	485.9	503.8	519.3	533.9	546.1	555.9	559.1	559.9
152.5°	479.4	495.3	509.5	520.9	531.2	539.0	542.2	543.0
155°	469.6	482.7	494.1	503.0	511.1	516.8	519.3	520.1
157.5°	459.8	470.6	479.4	486.4	492.8	497.4	499.7	499.5
160°	453.3	461.5	469.6	475.3	481.0	485.1	486.7	485.9
162.5°	446.2	453.6	460.5	465.5	469.9	473.4	473.7	473.5
165°	436.3	442.0	446.9	450.9	454.1	455.8	455.8	455.8
167.5°	426.8	430.6	434.3	437.2	438.9	440.3	439.7	439.5
170°	421.6	424.0	426.5	428.1	429.7	430.6	430.6	429.7
172.5°	415.7	418.2	420.0	420.9	421.3	422.7	421.4	420.6
175°	409.4	409.4	411.0	411.0	411.0	411.8	410.2	409.4
177.5°	405.0	405.6	405.6	405.6	405.0	405.6	403.7	403.7
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7

(END OF REPORT)