

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: P333240-930

Luminaire Tested: **S125DIP-S850D1035U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333240-930
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: S125DIP-S850D1035U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5814.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

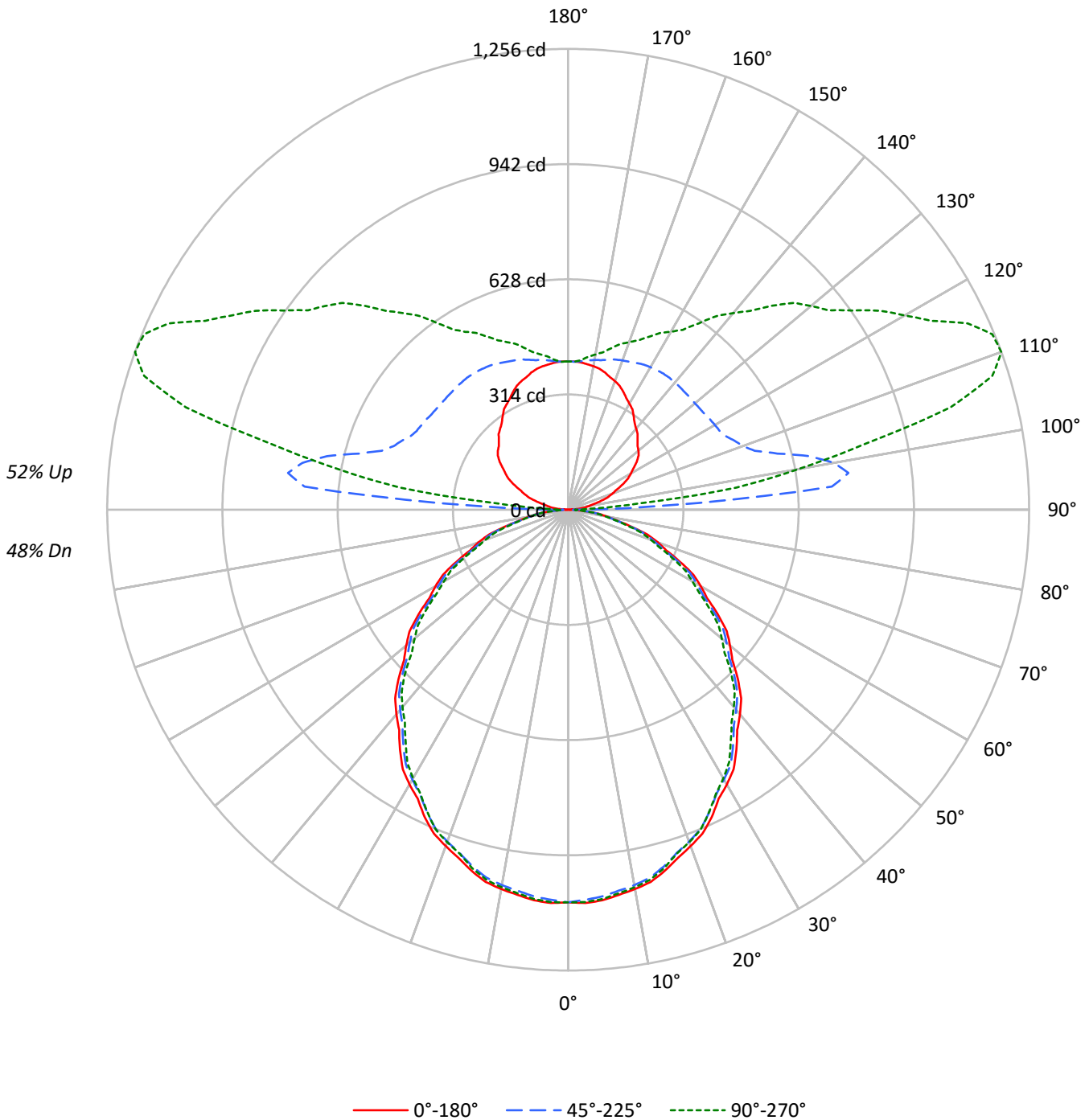
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	97	93	89	85	89	86	82	79	72	70	67	59	58	56	48	47	46	40
2	89	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	28
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	24	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	22	19
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	22	19	16
8	54	41	33	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6912	6912	6912
5°	6928	6862	6906
10°	6885	6813	6852
15°	6811	6731	6760
20°	6704	6616	6628
25°	6589	6480	6475
30°	6447	6334	6302
35°	6296	6176	6089
40°	6139	6004	5918
45°	5971	5847	5731
50°	5785	5657	5488
55°	5606	5444	5291
60°	5391	5227	5043
65°	5136	4968	4800
70°	4893	4670	4509
75°	4457	4312	4162
80°	3968	3905	3812
85°	3453	3520	3320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.7
10°-20°	285.1	4.9
20°-30°	420.9	7.2
30°-40°	491.1	8.4
40°-50°	493.3	8.5
50°-60°	433.0	7.4
60°-70°	322.6	5.5
70°-80°	184.5	3.2
80°-90°	55.9	1.0
90°-100°	292.6	5.0
100°-110°	629.0	10.8
110°-120°	590.3	10.2
120°-130°	478.4	8.2
130°-140°	383.9	6.6
140°-150°	289.7	5.0
150°-160°	203.9	3.5
160°-170°	120.2	2.1
170°-180°	39.1	0.7
0°-30°	806.9	13.9
0°-40°	1298.0	22.3
0°-60°	2224.3	38.3
0°-90°	2787.3	47.9
90°-120°	1512.0	26.0
90°-150°	2664.1	45.8
90°-180°	3027.0	52.1
0°-180°	5814.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1066	1058	1066	1065	101
15°	1019	1016	1007	1011	1011	287
25°	925	920	909	911	909	425
35°	798	795	783	779	772	499
45°	654	650	640	630	628	504
55°	498	495	484	476	470	444
65°	336	334	325	318	314	333
75°	179	177	173	170	167	190
85°	47	47	48	46	45	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°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1073.0	1072.5	1072.1	1071.6	1071.1	1070.2	1068.7	1067.2	1065.7	1064.2	1065.7
5°	1068.6	1068.2	1067.8	1067.5	1067.1	1065.9	1064.0	1062.2	1060.3	1058.4	1060.1
7.5°	1058.7	1058.4	1058.0	1057.6	1057.3	1056.1	1053.9	1051.9	1049.9	1047.7	1049.4
10°	1049.9	1049.6	1049.2	1048.8	1048.5	1047.3	1045.1	1043.1	1041.1	1038.9	1040.5
12.5°	1039.1	1038.4	1037.8	1037.1	1036.4	1035.1	1033.2	1031.3	1029.3	1027.4	1028.7
15°	1018.6	1018.1	1017.5	1016.9	1016.4	1015.0	1013.0	1010.9	1008.9	1006.7	1007.7
17.5°	995.1	994.3	993.4	992.6	991.8	990.3	988.1	986.0	983.8	981.7	982.8
20°	975.4	975.1	974.7	974.3	974.0	972.5	970.0	967.6	965.2	962.7	964.1
22.5°	955.8	955.1	954.5	953.7	953.1	951.6	949.3	947.0	944.7	942.4	943.3
25°	924.6	923.7	922.8	921.8	920.9	919.2	916.7	914.3	911.8	909.4	909.8
27.5°	888.2	887.7	887.1	886.6	886.0	884.4	881.9	879.4	876.9	874.3	874.4
30°	864.5	864.0	863.4	862.8	862.3	860.5	857.8	854.9	852.1	849.3	848.9
32.5°	838.8	837.9	837.1	836.2	835.4	833.6	831.1	828.6	826.1	823.5	822.9
35°	798.5	797.7	797.0	796.2	795.5	793.8	791.2	788.5	785.9	783.3	782.3
37.5°	756.7	755.7	754.7	753.8	752.8	751.1	748.7	746.2	743.7	741.3	739.8
40°	728.2	727.2	726.4	725.4	724.4	722.7	720.0	717.4	714.8	712.1	710.5
42.5°	697.7	696.9	696.1	695.4	694.6	692.8	690.2	687.5	684.9	682.3	680.8
45°	653.7	652.9	652.2	651.4	650.7	649.1	646.9	644.7	642.4	640.2	637.9
47.5°	606.3	606.3	606.3	606.3	606.4	605.1	602.3	599.7	597.0	594.3	591.9
50°	575.8	575.2	574.6	574.1	573.6	572.1	569.9	567.6	565.3	563.0	560.6
52.5°	544.6	544.2	543.8	543.4	543.0	541.5	539.2	536.7	534.3	531.9	529.8
55°	497.9	497.3	496.8	496.2	495.6	494.0	491.4	488.8	486.1	483.5	481.8
57.5°	448.6	448.3	448.0	447.7	447.4	446.1	443.9	441.7	439.4	437.2	435.0
60°	417.4	416.7	416.0	415.2	414.4	413.0	410.9	408.9	406.8	404.7	402.8
62.5°	384.9	384.3	383.8	383.1	382.5	381.3	379.6	377.8	376.0	374.2	372.3
65°	336.1	335.7	335.4	335.0	334.7	333.5	331.3	329.3	327.2	325.1	323.4
67.5°	288.9	288.1	287.3	286.5	285.8	284.5	283.1	281.5	280.0	278.4	277.0
70°	259.1	258.1	257.2	256.2	255.4	254.0	252.3	250.6	248.9	247.3	246.1
72.5°	226.6	225.9	225.3	224.7	224.0	223.1	222.1	220.9	219.9	218.8	217.5
75°	178.6	178.3	177.9	177.6	177.2	176.5	175.5	174.6	173.7	172.8	172.2
77.5°	134.4	134.3	134.2	134.0	133.9	133.5	133.0	132.5	131.9	131.4	131.1
80°	106.7	106.7	106.7	106.7	106.7	106.5	106.2	105.7	105.3	105.0	104.8
82.5°	82.3	82.0	81.7	81.4	81.1	80.9	80.8	80.8	80.7	80.6	80.3
85°	46.6	46.8	47.0	47.1	47.3	47.5	47.5	47.5	47.5	47.5	47.2
87.5°	18.4	18.6	18.9	19.2	19.6	19.8	19.9	20.1	20.1	20.2	20.4
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°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1067.2	1068.7	1070.2	1070.9	1070.7	1070.6	1070.4	1070.2
5°	1061.8	1063.5	1065.2	1065.9	1065.8	1065.6	1065.4	1065.2
7.5°	1051.1	1052.7	1054.3	1055.1	1054.9	1054.8	1054.5	1054.3
10°	1042.0	1043.5	1045.0	1045.6	1045.5	1045.2	1045.1	1044.9
12.5°	1029.8	1031.0	1032.3	1032.8	1032.8	1032.7	1032.7	1032.7
15°	1008.7	1009.6	1010.6	1011.0	1011.0	1011.0	1011.0	1011.0
17.5°	984.1	985.2	986.3	986.5	985.5	984.6	983.7	982.8
20°	965.4	966.7	968.0	968.2	967.3	966.3	965.4	964.4
22.5°	944.1	945.0	945.9	946.0	945.3	944.7	944.0	943.5
25°	910.1	910.5	910.9	910.8	910.3	909.7	909.1	908.6
27.5°	874.5	874.6	874.7	874.4	873.8	873.3	872.7	872.1
30°	848.6	848.2	847.7	847.3	846.8	846.2	845.6	845.1
32.5°	822.1	821.5	820.8	819.9	819.0	817.9	816.9	816.0
35°	781.4	780.4	779.5	778.3	776.7	775.3	773.7	772.3
37.5°	738.4	737.0	735.6	734.5	733.7	732.8	732.0	731.1
40°	708.7	707.0	705.3	704.2	703.6	703.1	702.5	702.0
42.5°	679.2	677.7	676.1	674.9	674.1	673.2	672.3	671.5
45°	635.6	633.3	631.1	629.7	629.2	628.6	628.0	627.5
47.5°	589.6	587.3	585.1	583.3	582.0	580.7	579.3	578.0
50°	558.2	555.7	553.3	551.4	550.1	548.8	547.5	546.2
52.5°	527.7	525.5	523.3	521.5	520.1	518.6	517.1	515.7
55°	480.1	478.4	476.7	475.2	473.9	472.5	471.2	469.9
57.5°	432.9	430.7	428.5	427.1	426.3	425.7	424.9	424.2
60°	401.0	399.1	397.2	395.6	394.3	393.0	391.7	390.4
62.5°	370.2	368.2	366.2	364.6	363.6	362.6	361.6	360.5
65°	321.8	320.1	318.4	317.2	316.4	315.7	314.9	314.1
67.5°	275.6	274.1	272.7	271.7	271.3	270.8	270.4	269.9
70°	245.0	243.9	242.7	241.8	241.0	240.3	239.5	238.8
72.5°	216.2	215.0	213.7	212.6	211.9	211.2	210.4	209.6
75°	171.6	171.0	170.5	169.8	169.1	168.3	167.5	166.8
77.5°	130.8	130.4	130.0	129.6	129.1	128.6	128.1	127.5
80°	104.6	104.4	104.3	104.0	103.6	103.2	102.8	102.5
82.5°	79.9	79.6	79.2	79.1	79.0	78.9	78.8	78.8
85°	47.0	46.9	46.6	46.4	46.0	45.7	45.2	44.8
87.5°	20.5	20.7	20.9	21.0	20.7	20.5	20.3	20.0
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: S125DIP-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)