

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1007740

Luminaire Tested: S124IP-B810UB27-4F0-XX-W2A-4

Issue Date: 5/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007740
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124IP-B810UB27-4F0-XX-W2A-4
Description: Define 4 Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

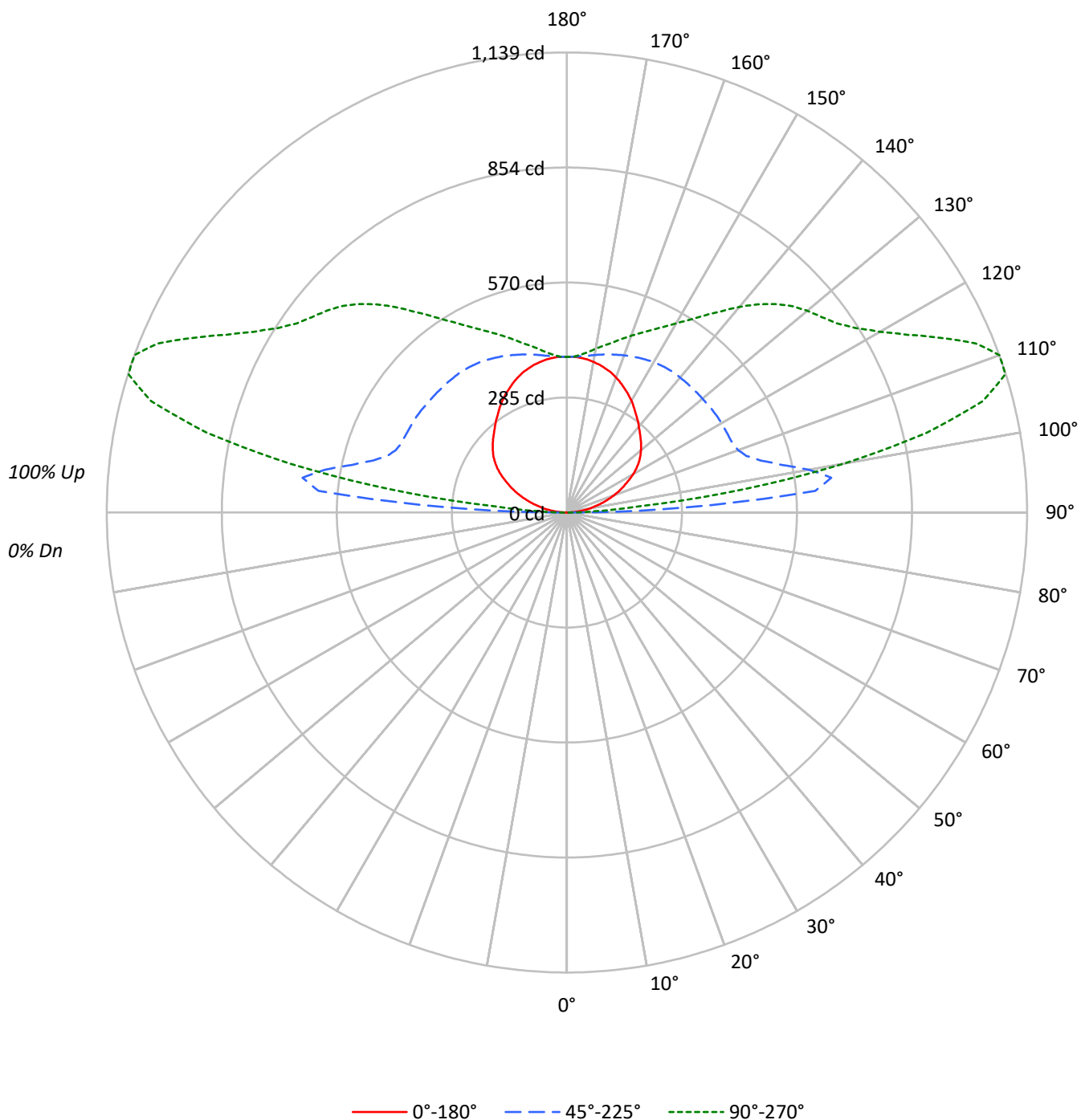
Lumens per Lamp: N/A
Luminaire Lumens: 2808.0 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 21.1
Input Voltage (V):
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: 24 FT

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

Luminous Intensity Polar Plot



TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 0°
Luminance: 0 cd/sqm

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	1.5	0.1
90°-100°	279.3	9.9
100°-110°	583.1	20.8
110°-120°	518.3	18.5
120°-130°	436.3	15.5
130°-140°	364.0	13.0
140°-150°	277.9	9.9
150°-160°	195.4	7.0
160°-170°	114.9	4.1
170°-180°	37.4	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.5	0.1
90°-120°	1380.6	49.2
90°-150°	2458.8	87.6
90°-180°	2806.0	99.9
0°-180°	2808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	6	14	15	16	2
95°	25	79	617	305	185	27
105°	89	128	497	1069	1065	94
115°	156	196	443	851	1023	155
125°	217	258	441	724	816	194
135°	258	307	437	643	730	200
145°	298	341	434	542	596	187
155°	338	365	422	478	499	156
165°	369	380	405	429	435	104
175°	385	385	388	394	392	37
180°	385	385	385	385	385	

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.8	2.3	4.5	5.3	6.1	6.1	10.6	10.6	12.1	13.6	12.9
92.5°	10.6	15.1	23.5	34.8	48.5	68.1	115.1	188.5	259.7	296.8	246.8
95°	25.0	27.3	34.8	44.7	62.8	94.6	160.5	284.6	465.6	617.0	634.4
97.5°	41.6	41.6	48.5	57.5	73.4	100.7	152.9	259.7	445.9	660.1	795.7
100°	57.5	57.5	62.8	71.9	86.3	110.5	155.2	240.7	395.2	608.7	802.5
102.5°	72.7	74.2	78.7	87.1	100.7	123.4	162.8	235.4	361.1	544.3	745.7
105°	88.6	90.8	94.6	103.7	117.3	139.3	175.6	238.5	344.5	496.6	674.5
107.5°	106.0	107.5	111.3	121.1	134.0	156.0	189.3	247.6	339.9	465.6	616.2
110°	123.4	124.9	128.7	137.8	151.4	171.8	205.2	258.2	341.4	451.2	574.6

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	140.1	141.6	146.1	154.4	168.1	188.5	220.3	269.5	346.0	444.4	551.1
115°	156.0	158.2	163.5	171.1	185.5	205.9	236.2	281.6	352.0	442.9	538.3
117.5°	172.6	174.9	179.4	187.7	201.4	222.6	251.3	293.7	358.1	442.1	531.4
120°	189.3	190.8	196.1	204.4	217.3	238.5	267.2	306.6	364.9	442.1	526.1
122.5°	204.4	205.9	211.2	218.8	233.2	253.6	282.4	318.7	371.7	441.4	520.1
125°	217.3	220.3	224.8	233.2	247.6	268.7	296.0	330.8	378.5	440.6	513.3
127.5°	229.4	231.7	237.0	246.0	261.2	282.4	308.9	341.4	383.8	439.1	504.2
130°	239.2	242.3	248.3	259.7	274.0	296.0	321.7	351.3	389.9	438.3	495.9
132.5°	249.1	251.3	259.7	270.3	286.2	306.6	332.3	361.1	395.2	437.6	488.3
135°	258.2	261.2	268.7	281.6	297.5	317.2	342.2	369.4	400.5	436.8	480.7
137.5°	267.2	270.3	278.6	290.7	307.4	326.3	349.8	375.5	403.5	436.8	473.9
140°	277.1	279.3	287.7	300.5	316.4	334.6	357.3	381.5	407.3	436.1	468.6
142.5°	287.7	289.9	297.5	309.6	324.8	342.2	364.1	386.1	410.3	436.1	464.1
145°	297.5	299.8	307.4	318.0	332.3	349.0	368.7	389.1	411.1	434.5	458.8
147.5°	308.9	309.6	316.4	327.8	339.9	355.1	374.0	392.1	411.8	432.3	454.2
150°	319.5	320.2	326.3	335.4	346.7	361.1	377.8	394.4	411.8	430.0	448.9
152.5°	329.3	329.3	335.4	343.7	353.5	366.4	380.8	395.9	410.3	426.2	442.9
155°	338.4	339.2	343.7	351.3	359.6	371.0	383.8	396.7	408.8	422.4	436.8
157.5°	347.5	347.5	352.0	358.1	365.7	374.7	386.1	396.7	407.3	418.6	430.8
160°	355.8	355.8	358.8	364.1	370.2	378.5	387.6	396.7	405.0	414.1	423.9
162.5°	363.4	362.6	364.9	369.4	374.7	380.8	389.1	396.7	402.7	409.6	417.9
165°	368.7	368.7	370.2	374.0	377.8	382.3	389.1	395.2	399.7	405.0	411.1
167.5°	374.7	374.0	374.7	377.8	380.0	383.8	389.1	393.7	396.7	400.5	405.0
170°	378.5	377.8	378.5	380.8	382.3	384.6	388.4	392.1	393.7	395.9	399.0
172.5°	382.3	381.5	381.5	383.1	383.8	385.3	387.6	390.6	390.6	391.4	393.7
175°	384.6	383.8	383.8	384.6	385.3	385.3	386.8	389.1	388.4	388.4	389.9
177.5°	386.1	385.3	384.6	385.3	385.3	385.3	386.1	387.6	386.1	386.1	386.8
180°	385.3	385.3	385.3	385.3	385.3	385.3	385.3	385.3	385.3	385.3	385.3

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	13.6	14.4	15.1	15.1	15.9	16.7	15.9	15.9
92.5°	182.4	136.3	107.5	88.6	77.2	71.9	68.9	68.9
95°	561.0	443.6	342.2	268.7	231.7	208.2	194.6	184.7
97.5°	807.8	749.5	666.2	581.4	529.9	484.5	461.8	443.6
100°	913.0	928.1	891.0	835.0	769.2	723.0	700.3	694.2
102.5°	907.7	997.8	1020.5	1005.4	971.3	941.0	916.8	912.2
105°	847.9	978.9	1053.8	1084.8	1086.4	1080.3	1069.7	1065.2
107.5°	774.5	916.0	1020.5	1084.1	1117.4	1131.0	1137.1	1137.8
110°	709.3	840.3	950.1	1033.4	1087.1	1118.9	1132.5	1139.3

TEST NUMBER: P1007740

CATALOG NUMBER: S124IP-B810UB27-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	661.7	773.7	875.9	959.2	1022.0	1062.1	1082.6	1094.7
115°	632.9	726.0	814.6	887.3	947.1	992.5	1016.7	1022.8
117.5°	616.2	695.0	766.9	830.5	883.5	922.8	948.6	952.4
120°	605.6	676.0	736.6	790.4	833.5	866.8	886.5	894.8
122.5°	596.5	663.9	717.7	763.1	797.9	825.2	841.1	849.4
125°	585.9	651.1	703.3	744.9	775.2	797.2	811.5	816.1
127.5°	573.8	636.7	688.9	728.3	758.6	778.2	790.4	794.9
130°	558.7	618.5	670.0	710.1	741.1	760.1	772.2	776.7
132.5°	542.8	598.1	648.0	688.2	718.4	740.4	751.7	756.3
135°	528.4	577.6	623.8	661.7	691.9	713.1	725.2	729.8
137.5°	514.8	557.9	598.1	632.9	661.7	683.6	693.4	698.7
140°	503.4	539.0	573.1	604.9	631.4	648.0	658.6	664.7
142.5°	492.8	523.1	551.1	577.6	600.3	615.5	624.6	628.3
145°	483.0	508.7	531.4	552.6	571.6	584.4	592.0	595.8
147.5°	474.7	495.9	514.8	532.2	546.6	557.9	564.0	565.5
150°	467.1	484.5	499.6	513.3	525.4	535.2	539.8	540.5
152.5°	458.8	473.2	486.8	497.4	507.2	514.8	517.1	517.8
155°	450.4	462.6	473.9	483.0	490.6	496.6	498.9	498.9
157.5°	441.4	452.0	461.8	469.4	475.4	480.0	481.5	481.5
160°	433.0	441.4	449.7	455.7	460.3	464.8	465.6	465.6
162.5°	424.7	431.5	437.6	442.9	445.9	450.4	451.2	450.4
165°	417.1	421.7	427.0	430.8	433.8	436.8	436.1	435.3
167.5°	409.6	413.3	417.9	420.2	421.7	423.9	423.9	423.2
170°	402.7	405.0	408.0	410.3	411.8	412.6	411.8	411.8
172.5°	396.7	398.2	399.7	401.2	402.0	402.7	402.0	400.5
175°	391.4	392.1	393.7	393.7	393.7	395.2	393.7	392.1
177.5°	387.6	388.4	388.4	389.1	388.4	389.1	387.6	386.1
180°	385.3	385.3	385.3	385.3	385.3	385.3	385.3	385.3

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