

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: STREETWORKS

Report Number: P198861

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198861  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SL2-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9552 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 85  
Input Voltage (V): NR  
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: 28.75 FT

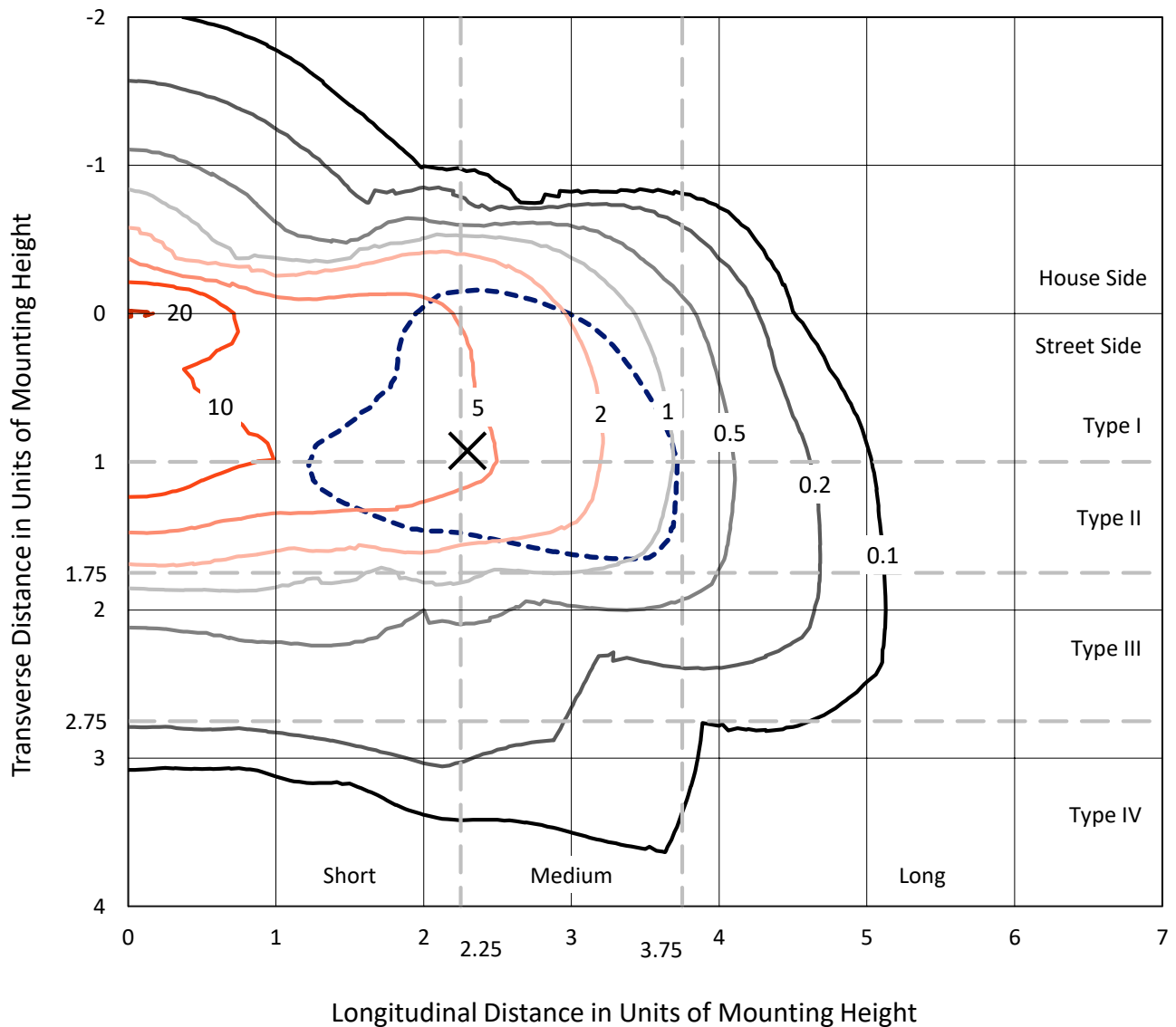


REPORT NUMBER: P198861

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7050-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

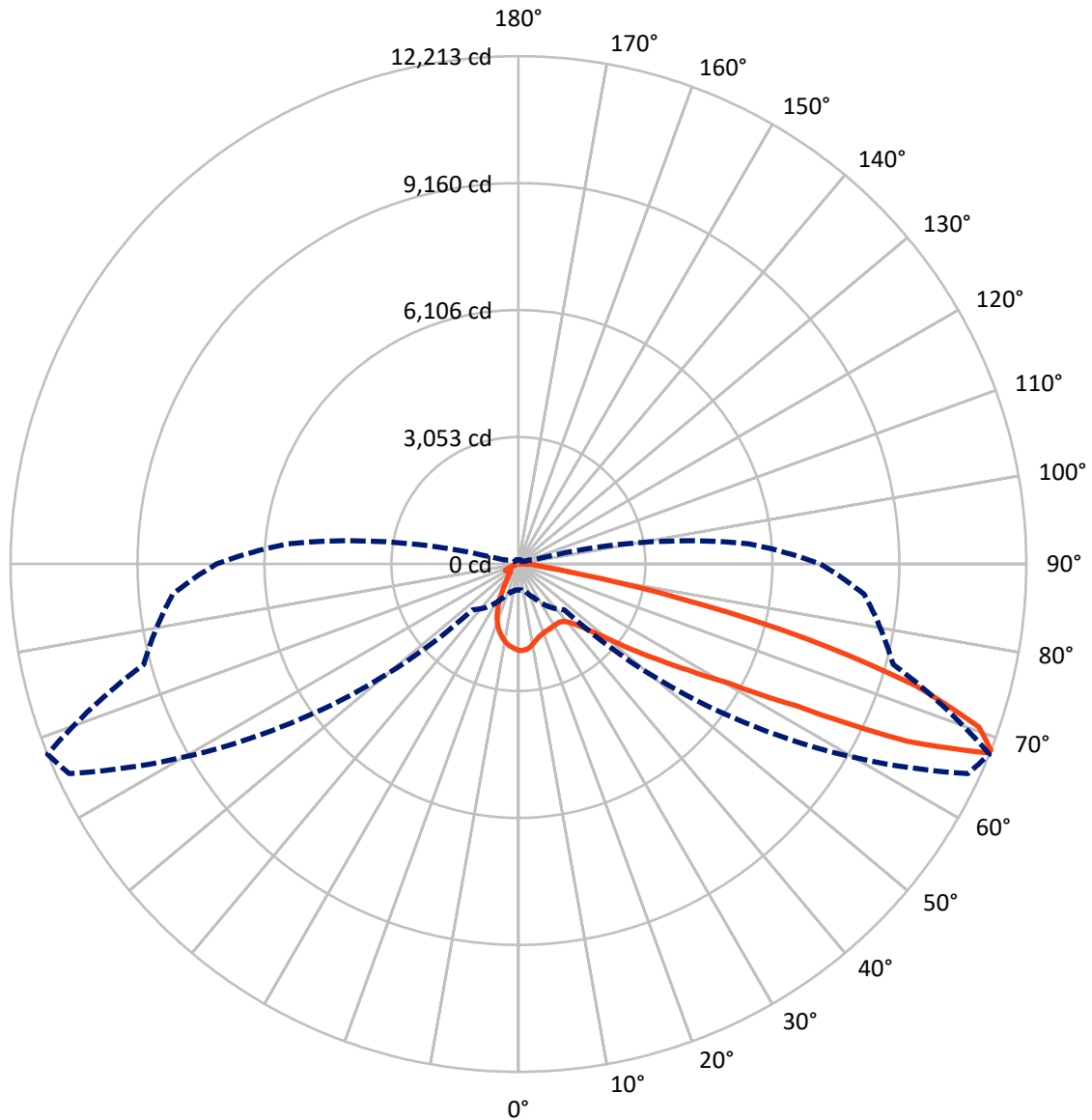


Based on 10 foot mounting height. Maximum calculated value = 20.8 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P198861

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7050-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P198861

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-7050-800

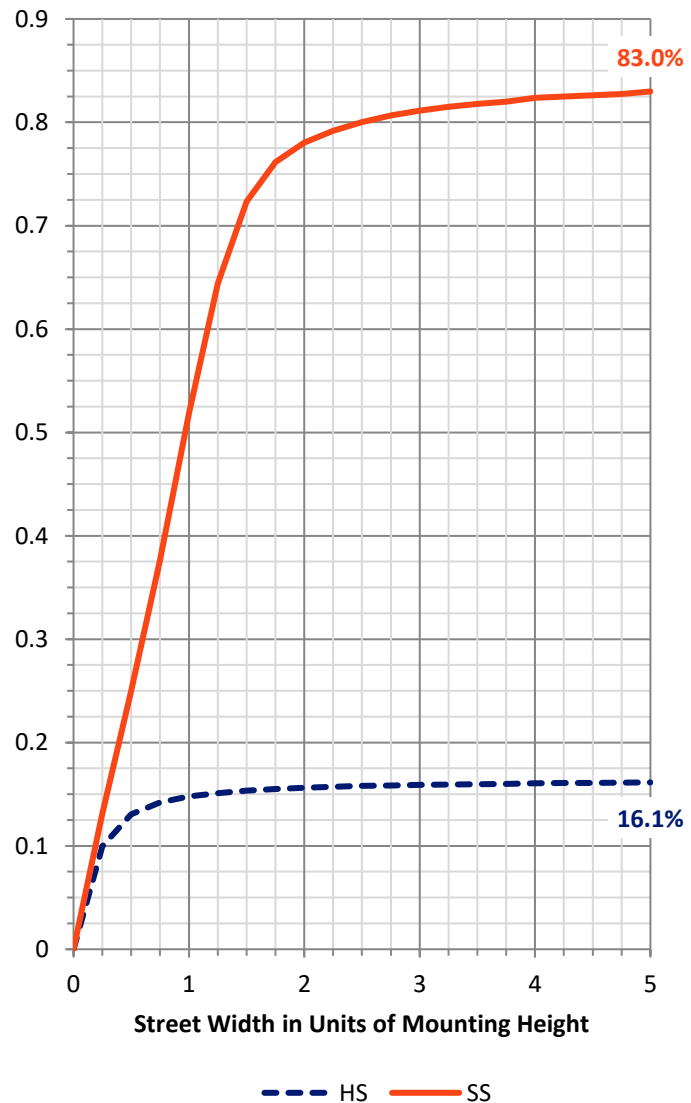
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1562.7	0.0	1562.7
	% Fixture	16.4	0.0	16.4
<b>Street Side</b>	Lumens	7989.3	0.0	7989.3
	% Fixture	83.6	0.0	83.6
<b>Total</b>	Lumens	9552.0	0.0	9552.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.1	1.9
10°-20°	413.0	4.3
20°-30°	558.6	5.8
30°-40°	787.6	8.2
40°-50°	1295.2	13.6
50°-60°	2007.6	21.0
60°-70°	2603.1	27.3
70°-80°	1493.8	15.6
80°-90°	214.9	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9552.0	100.0
0°-180°	9552.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198861

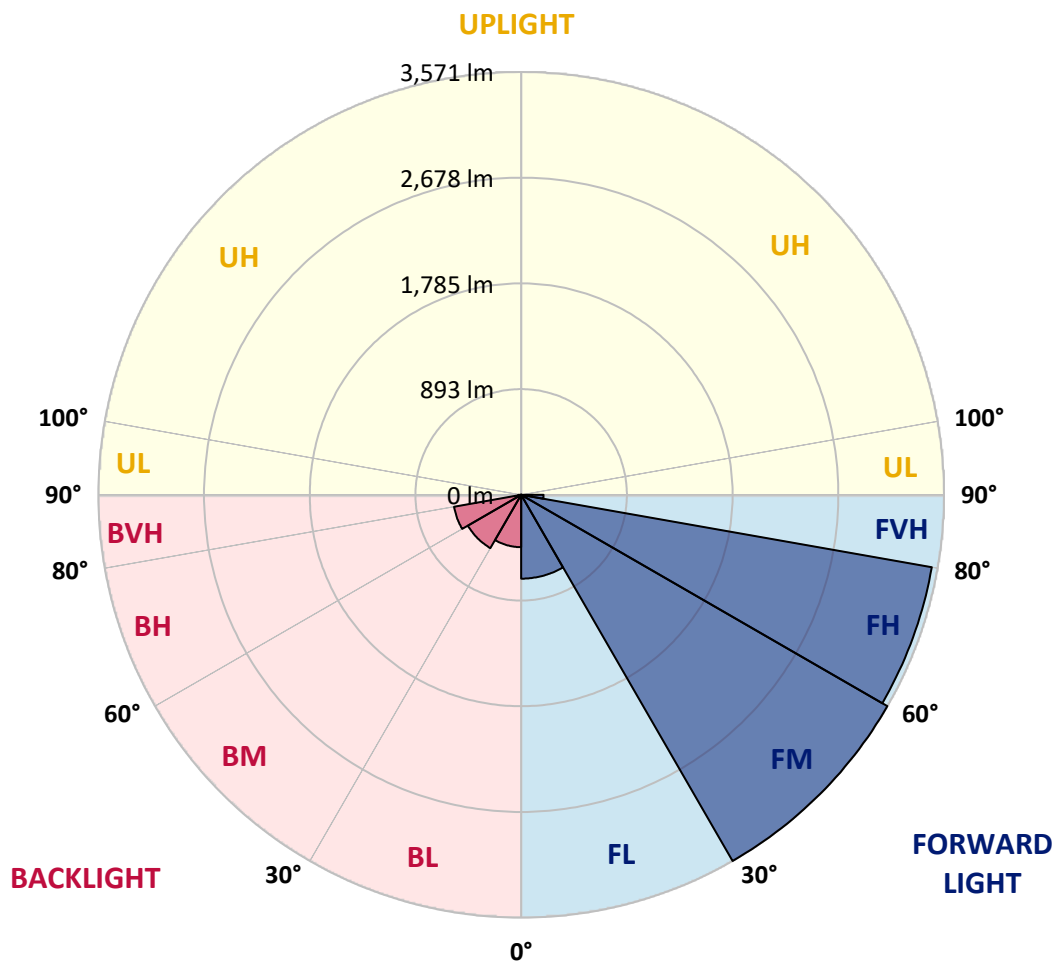
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	708.0	7.4			
FM	(30°-60°)	3570.7	37.4			
FH	(60°-80°)	3521.3	36.9			G2/5000
FVH	(80°-90°)	189.3	2.0			G2/225
BL	(0°-30°)	441.8	4.6	B1/500		
BM	(30°-60°)	519.8	5.4	B1/1000		
BH	(60°-80°)	575.5	6.0	B2/1000		G2/1000
BVH	(80°-90°)	25.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4
2.5°	2022.9	2039.1	2039.1	2051.0	2061.6	2070.3	2077.8	2077.8	2077.8	2072.8	2068.4
5°	1810.1	1832.0	1835.1	1865.0	1904.3	1952.4	2006.0	2053.5	2062.8	2080.3	2087.2
7.5°	1662.2	1669.1	1681.0	1701.6	1741.5	1800.8	1885.0	1991.1	2016.7	2071.6	2100.3
10°	1557.4	1563.0	1573.0	1593.6	1629.8	1683.5	1766.4	1904.3	1946.8	2044.1	2100.9
12.5°	1480.7	1485.0	1494.4	1513.1	1549.9	1598.0	1682.8	1826.3	1878.8	2016.7	2109.6
15°	1420.8	1428.3	1435.7	1453.8	1491.3	1537.5	1623.6	1769.6	1826.3	1994.8	2125.9
17.5°	1397.1	1400.8	1402.1	1411.4	1445.1	1491.9	1578.0	1729.6	1788.3	1977.3	2138.3
20°	1412.0	1412.7	1400.2	1393.9	1413.3	1456.3	1539.9	1699.7	1759.6	1961.7	2143.3
22.5°	1477.6	1477.6	1445.1	1417.7	1404.5	1431.4	1514.4	1679.1	1744.0	1949.9	2143.3
25°	1602.3	1596.7	1546.2	1491.9	1433.9	1422.6	1498.1	1666.0	1732.1	1943.7	2135.2
27.5°	1766.4	1761.5	1697.2	1616.7	1511.9	1441.4	1492.5	1655.4	1720.3	1934.3	2117.7
30°	1966.1	1961.7	1888.7	1783.3	1628.6	1500.6	1505.6	1647.9	1710.9	1918.7	2088.4
32.5°	2165.2	2162.7	2104.6	1996.7	1789.5	1601.1	1539.9	1646.6	1705.9	1900.0	2052.8
35°	2365.5	2365.5	2329.9	2238.8	2006.0	1752.1	1611.7	1669.7	1715.3	1890.0	2022.3
37.5°	2661.2	2649.4	2583.2	2489.0	2278.7	1948.0	1727.8	1718.4	1751.5	1906.8	2012.3
40°	3119.2	3084.9	2919.5	2761.0	2576.4	2198.9	1897.5	1812.6	1832.6	1964.2	2036.0
42.5°	3598.4	3544.1	3325.1	3071.8	2884.0	2508.3	2120.2	1965.5	1964.9	2075.3	2111.5
45°	4009.6	3981.5	3744.4	3423.1	3235.3	2856.5	2401.6	2192.6	2170.2	2247.5	2256.9
47.5°	4248.6	4229.9	4087.0	3795.0	3652.1	3267.7	2758.6	2507.7	2465.3	2511.5	2497.1
50°	4182.4	4200.5	4159.4	4010.2	4100.1	3845.5	3213.4	2939.5	2859.0	2905.2	2870.2
52.5°	3834.3	3882.9	3919.8	3948.5	4357.8	4618.6	3785.0	3478.6	3411.8	3403.7	3370.0
55°	3207.2	3284.6	3400.6	3611.5	4288.5	5239.4	4783.3	4130.7	4033.3	3982.1	3995.3
57.5°	2182.6	2299.9	2550.1	2951.4	3928.5	5504.0	6259.6	4973.0	4808.3	4626.1	4668.5
60°	1202.4	1300.3	1598.0	2002.3	3106.7	5464.7	7568.1	6342.0	5823.5	5340.5	5427.9
62.5°	778.1	799.3	1020.8	1367.7	1906.8	4824.5	8295.0	8630.1	7531.3	6282.7	6405.6
65°	625.2	640.2	748.8	1103.2	1328.4	3103.6	8327.4	11003.6	10279.2	7563.1	7566.8
67.5°	610.9	617.7	680.7	927.8	1246.1	1689.7	7198.1	11939.6	12107.4	9074.3	8343.7
68°	619.6	627.7	691.4	899.1	1245.4	1557.4	6652.7	11925.2	12212.9	9327.0	8343.7
70°	546.6	556.6	705.1	930.3	1192.4	1339.0	4555.6	11291.9	11754.9	9908.0	7916.9
72.5°	285.8	277.7	348.8	734.4	1342.2	1395.2	2406.6	9433.7	9974.1	9176.0	6839.9
75°	222.8	202.8	195.3	290.1	1180.5	1447.0	1397.7	6705.1	7113.2	6614.7	4571.8
77.5°	209.7	185.3	171.0	171.6	519.8	1505.6	1130.6	3946.0	3946.0	3155.4	1458.8
80°	168.5	146.0	136.6	156.0	250.8	1387.7	1179.9	1798.3	1533.7	815.5	401.8
82.5°	111.1	99.2	99.8	126.7	190.3	926.6	1366.5	887.9	667.0	361.3	236.5
85°	70.5	60.5	67.4	88.6	142.3	413.1	1352.8	617.1	441.8	202.8	117.9
87.5°	35.6	27.5	33.7	46.2	86.7	118.6	1113.8	551.0	327.6	84.2	64.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P198861

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4	2078.4
2.5°	2068.4	2054.7	2047.9	2036.6	2022.9	2009.2	1999.8	1995.4	1992.9	1994.2	1993.6
5°	2083.4	2065.3	2036.0	1994.2	1951.1	1905.6	1870.6	1843.8	1827.0	1822.0	1820.7
7.5°	2094.7	2068.4	2013.5	1937.4	1863.8	1783.9	1715.9	1661.6	1624.8	1608.0	1607.3
10°	2092.8	2059.1	1972.4	1860.0	1752.1	1634.8	1528.1	1437.0	1370.9	1339.0	1337.8
12.5°	2094.7	2048.5	1921.8	1769.6	1614.8	1447.0	1288.5	1146.8	1048.3	1001.5	999.6
15°	2102.1	2037.2	1870.0	1668.5	1454.5	1217.4	990.9	813.0	723.2	692.6	692.6
17.5°	2101.5	2018.5	1810.1	1551.2	1264.2	946.6	676.4	566.6	557.8	585.9	590.3
20°	2089.0	1988.6	1732.8	1412.0	1040.8	655.2	458.6	443.0	512.9	590.3	599.0
22.5°	2069.7	1949.9	1643.5	1250.4	780.6	426.8	353.8	377.5	472.3	568.4	582.2
25°	2042.9	1903.1	1541.2	1062.6	519.1	307.0	295.1	324.5	391.2	455.5	465.5
27.5°	2003.6	1843.8	1429.5	859.2	331.3	252.7	257.1	277.7	306.4	333.8	339.4
30°	1954.3	1774.6	1307.8	633.9	251.5	225.9	233.4	245.8	258.3	275.8	279.5
32.5°	1904.3	1704.1	1181.2	435.5	219.6	211.5	219.0	225.9	236.5	248.3	250.8
35°	1859.4	1638.5	1050.8	303.9	205.9	202.2	205.9	210.3	220.9	232.7	234.0
37.5°	1827.0	1584.9	914.7	240.2	197.8	194.1	195.9	197.8	210.3	227.7	229.6
40°	1822.6	1549.3	776.8	215.9	191.6	186.6	185.3	186.6	202.8	222.8	224.6
42.5°	1865.0	1551.2	642.1	205.9	186.6	181.0	176.0	178.5	192.8	208.4	209.7
45°	1965.5	1594.9	525.4	201.5	182.2	177.8	170.3	171.6	178.5	186.6	187.8
47.5°	2142.7	1690.3	436.2	199.0	178.5	174.7	165.4	161.6	162.2	166.6	166.6
50°	2426.0	1850.1	381.9	196.5	175.3	168.5	157.9	150.4	148.5	151.0	151.6
52.5°	2848.4	2124.0	355.7	191.6	169.7	160.4	148.5	141.0	137.9	140.4	140.4
55°	3419.3	2561.4	343.2	184.7	162.9	150.4	139.8	133.5	131.0	132.9	132.9
57.5°	4070.1	3129.8	364.4	175.3	154.1	139.8	132.3	127.9	126.0	127.9	128.5
60°	4843.2	3873.6	510.4	163.5	144.8	130.4	126.0	123.5	122.3	124.2	124.2
62.5°	5870.9	4863.2	789.9	154.1	134.8	121.7	120.4	119.2	117.9	119.8	119.8
65°	6980.3	5763.6	813.0	148.5	126.0	114.2	114.8	114.8	113.6	115.4	115.4
67.5°	7333.5	5685.6	454.2	141.6	115.4	106.7	109.2	109.2	108.6	110.4	109.8
68°	7258.6	5562.0	395.6	139.8	113.6	104.8	107.3	107.9	107.3	109.2	108.6
70°	6700.8	4883.2	260.2	129.2	105.5	98.6	102.3	103.0	102.3	104.8	104.2
72.5°	5531.5	3662.7	192.2	112.9	95.5	90.5	94.2	94.8	95.5	98.0	97.3
75°	3512.9	2022.9	151.6	96.1	85.5	81.1	84.9	86.7	88.0	91.7	89.9
77.5°	962.2	614.0	122.9	81.7	73.6	71.8	74.3	76.7	78.0	82.4	79.2
80°	336.9	271.4	102.3	69.3	61.1	60.5	63.0	65.5	66.8	70.5	66.8
82.5°	204.7	177.2	81.7	54.3	48.0	47.4	50.5	53.0	54.3	54.3	51.8
85°	106.7	93.6	59.9	38.1	33.1	31.2	36.8	39.9	40.6	39.9	38.1
87.5°	59.9	53.0	31.8	18.1	15.0	15.6	19.3	23.7	25.6	25.0	23.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)