

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: P198889

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7050-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
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-SL4-7050-1200-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10776 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 128
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

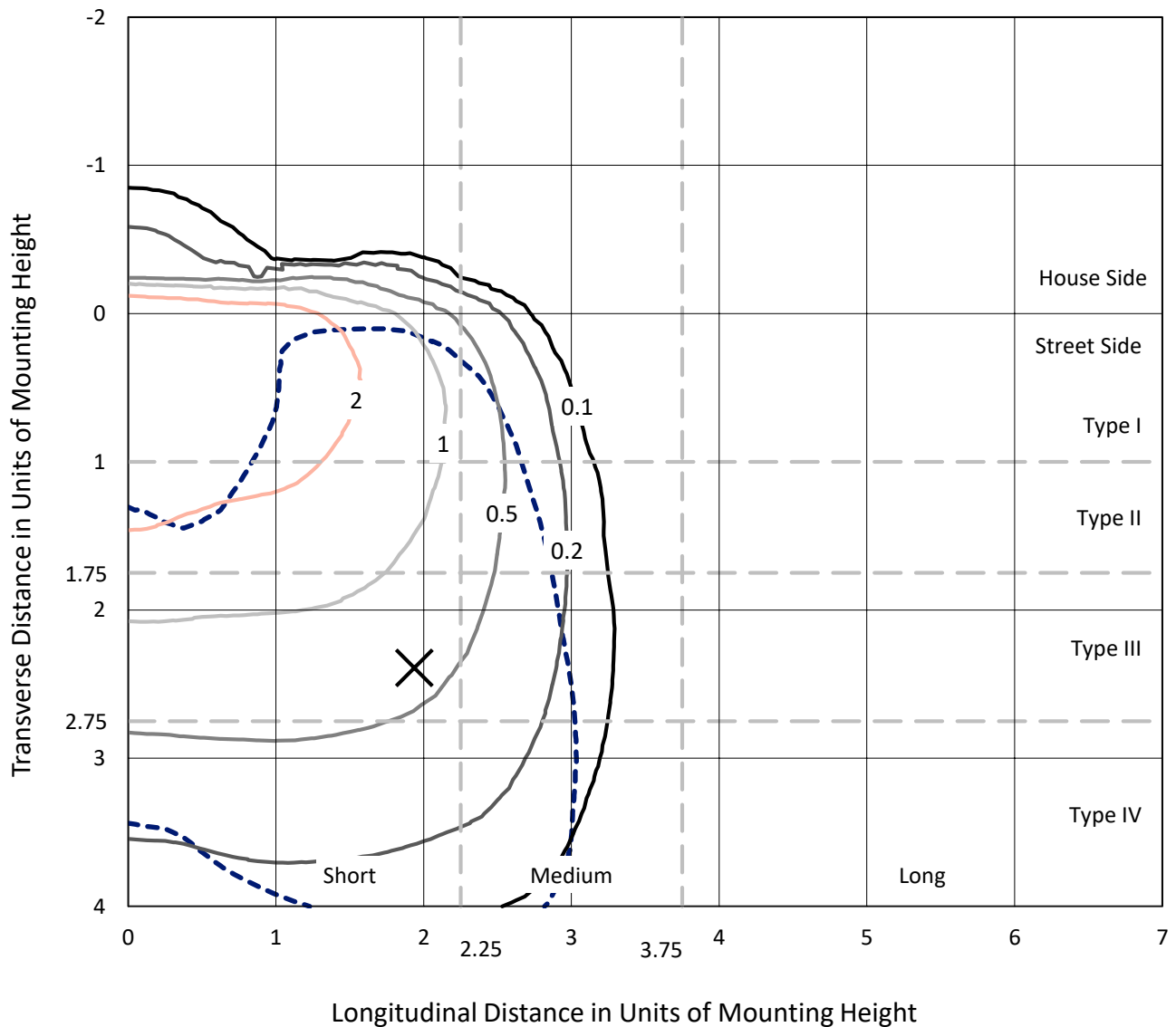


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

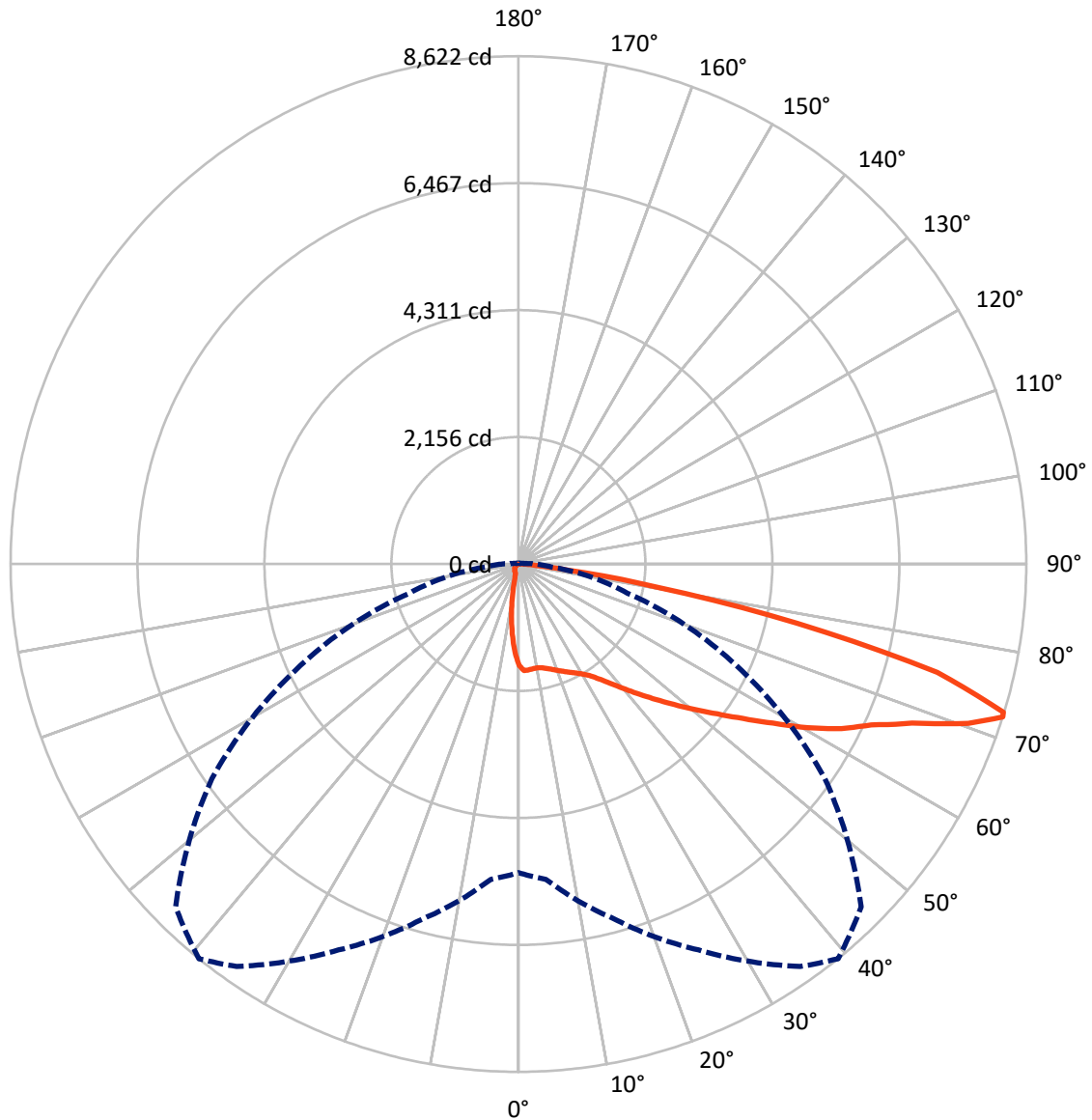


Based on 20 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical



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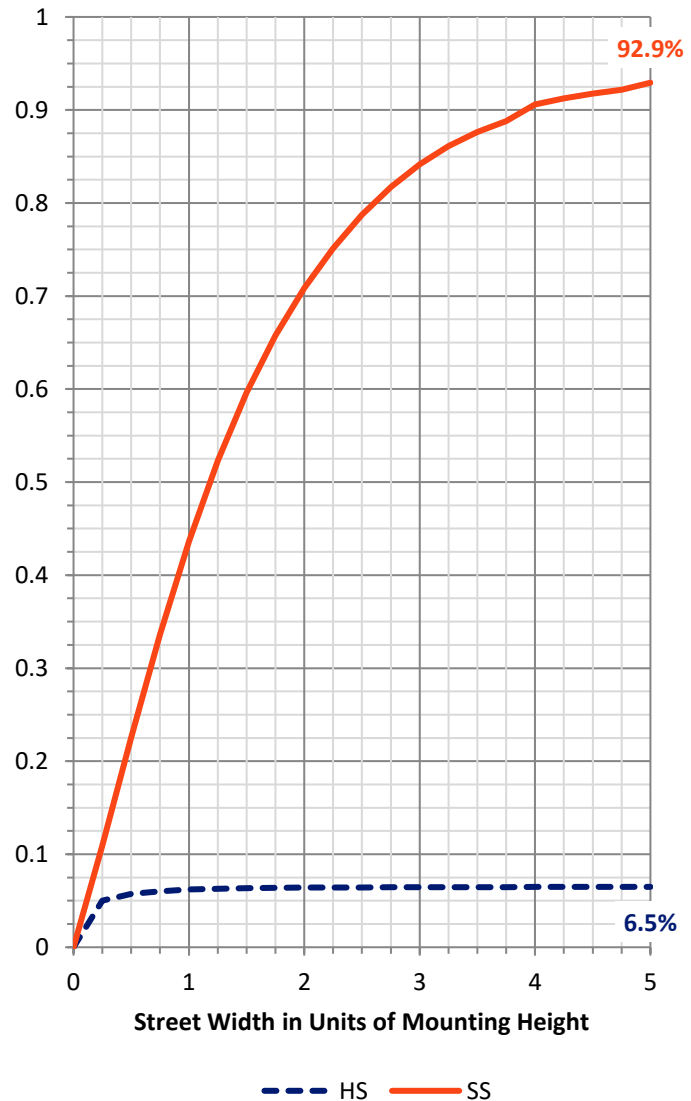
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	706.2	0.0	706.2
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	10069.8	0.0	10069.8
	% Fixture	93.4	0.0	93.4
Total	Lumens	10776.0	0.0	10776.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	1.3
10°-20°	339.6	3.2
20°-30°	564.1	5.2
30°-40°	899.0	8.3
40°-50°	1483.9	13.8
50°-60°	2241.0	20.8
60°-70°	2919.3	27.1
70°-80°	1972.6	18.3
80°-90°	216.0	2.0
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°	10776.0	100.0
0°-180°	10776.0	100.0

Coefficient of Utilization



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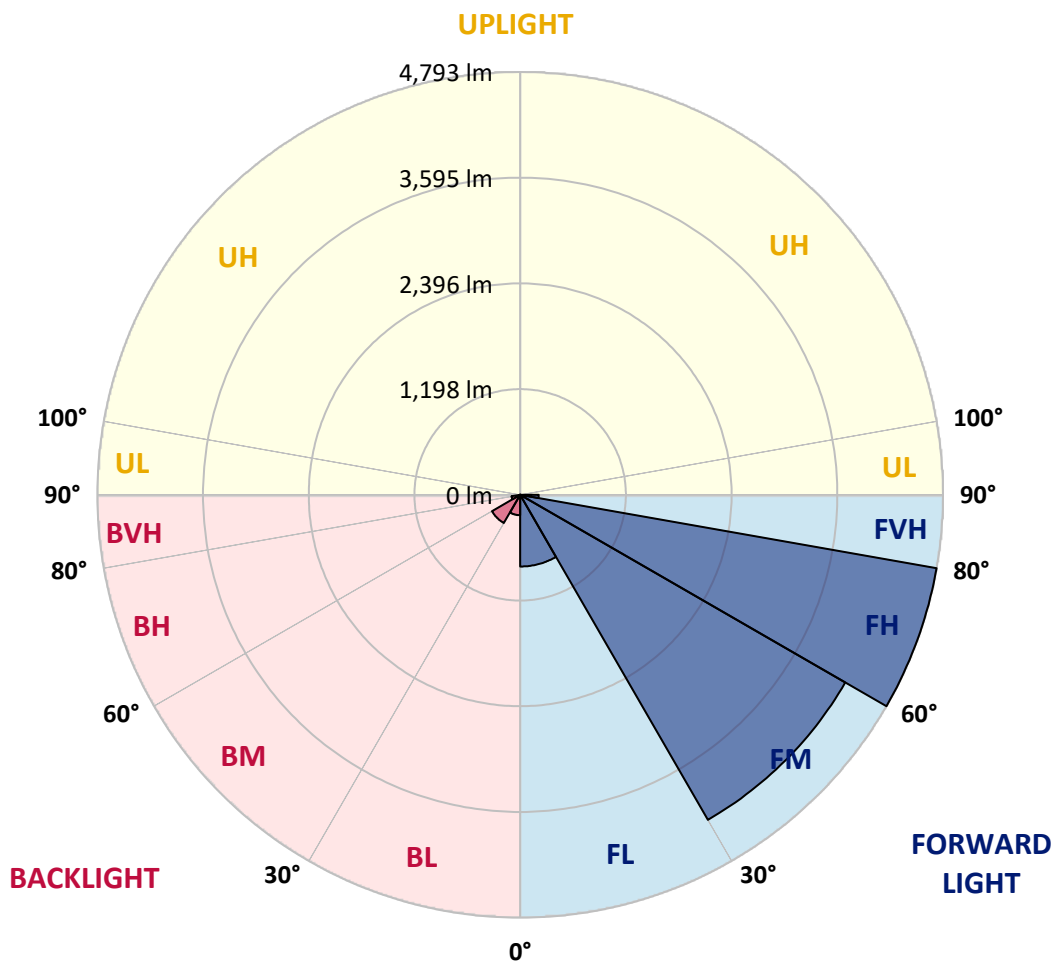
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	812.8	7.5			
FM	(30°-60°)	4254.5	39.5			
FH	(60°-80°)	4792.7	44.5			G2/5000
FVH	(80°-90°)	209.8	1.9			G2/225
BL	(0°-30°)	231.3	2.1	B1/500		
BM	(30°-60°)	369.5	3.4	B1/1000		
BH	(60°-80°)	99.3	0.9	B0/110		G0/110
BVH	(80°-90°)	6.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8
2.5°	1836.6	1840.0	1835.7	1828.1	1817.1	1810.3	1801.0	1780.7	1755.3	1733.2	1707.8
5°	1851.0	1852.7	1847.6	1833.2	1816.3	1806.9	1795.1	1773.1	1746.8	1716.3	1670.6
7.5°	1855.2	1854.4	1848.5	1830.7	1804.4	1792.5	1772.2	1745.1	1718.0	1690.0	1638.4
10°	1853.5	1853.5	1849.3	1832.4	1802.7	1791.7	1768.8	1740.0	1706.1	1678.2	1623.1
12.5°	1847.6	1851.0	1848.5	1839.1	1817.1	1808.6	1788.3	1759.5	1727.3	1698.5	1640.1
15°	1855.2	1860.3	1865.4	1862.0	1849.3	1841.7	1823.0	1793.4	1767.1	1736.6	1673.9
17.5°	1885.7	1896.7	1908.6	1909.4	1895.9	1882.3	1861.2	1830.7	1805.2	1777.3	1709.5
20°	1943.3	1951.8	1973.8	1978.1	1951.0	1931.5	1901.8	1866.2	1840.8	1817.1	1742.6
22.5°	2028.9	2038.2	2056.0	2050.1	2004.3	1981.5	1944.2	1903.5	1877.3	1863.7	1780.7
25°	2158.5	2161.0	2165.3	2139.0	2063.6	2038.2	1992.5	1946.7	1925.5	1923.8	1834.9
27.5°	2311.0	2314.4	2295.7	2237.3	2129.7	2096.7	2045.0	2003.5	1993.3	2006.0	1903.5
30°	2485.5	2486.3	2434.7	2339.8	2205.9	2169.5	2116.1	2070.4	2079.7	2111.1	1991.6
32.5°	2664.2	2655.8	2584.6	2460.9	2310.1	2266.1	2220.3	2174.6	2201.7	2265.2	2120.4
35°	2827.7	2824.4	2740.5	2596.5	2445.7	2406.7	2373.7	2325.4	2369.4	2472.8	2295.7
37.5°	2991.2	2988.7	2893.0	2743.0	2612.6	2584.6	2560.0	2522.8	2594.8	2746.4	2530.4
40°	3171.7	3167.4	3049.7	2905.7	2806.6	2791.3	2776.9	2760.8	2883.7	3094.6	2822.7
42.5°	3394.5	3375.8	3215.7	3082.7	3020.0	3024.3	3025.1	3041.2	3233.5	3508.8	3167.4
45°	3650.3	3608.8	3382.6	3272.5	3254.7	3280.1	3305.5	3372.4	3641.0	3985.8	3548.7
47.5°	3898.5	3831.6	3574.9	3476.6	3513.1	3565.6	3626.6	3757.0	4098.4	4484.7	3894.3
50°	4112.0	4043.4	3765.5	3684.2	3800.3	3878.2	3986.6	4184.0	4581.3	4906.6	4112.0
52.5°	4279.7	4225.5	3967.1	3912.9	4118.8	4225.5	4395.8	4655.0	5037.1	5184.5	4264.5
55°	4403.4	4376.3	4160.3	4167.9	4472.9	4627.1	4838.8	5131.9	5421.7	5400.5	4378.8
57.5°	4543.2	4522.0	4362.7	4468.6	4899.0	5098.1	5342.9	5578.4	5701.2	5574.2	4490.7
60°	4686.4	4693.1	4608.4	4832.9	5425.9	5646.2	5859.6	5918.1	5941.0	5750.4	4608.4
62.5°	4794.8	4823.6	4831.2	5226.0	5966.4	6154.4	6246.8	6205.3	6200.2	5986.7	4599.1
65°	4919.3	4994.7	5120.1	5657.2	6457.7	6581.4	6647.5	6707.6	6580.6	6057.0	4146.7
67.5°	5134.5	5253.1	5535.2	6185.8	7025.3	7208.3	7395.5	7332.0	6637.3	5342.9	3159.0
70°	5424.2	5569.1	6067.2	6876.2	7795.3	8102.0	8258.7	7282.0	5635.1	3691.8	1666.3
72°	5241.2	5372.5	6231.5	7228.6	8340.9	8622.1	8229.9	6351.8	4084.9	1913.7	558.3
72.5°	5063.3	5198.9	6179.0	7224.4	8395.1	8610.3	8042.7	5985.0	3614.7	1489.3	384.6
75°	3513.1	3684.2	5297.1	6494.1	7581.0	7344.7	6153.6	3624.0	1309.7	255.8	127.1
77.5°	1816.3	1948.4	3213.2	4588.9	5283.6	4838.8	3636.8	1572.3	362.6	135.5	83.9
80°	1125.8	1191.1	1502.8	2261.0	2744.7	2400.8	1604.5	635.4	232.1	80.5	66.9
82.5°	582.8	632.8	946.3	912.4	1014.0	842.9	592.1	532.0	143.2	50.0	68.6
85°	191.5	203.3	581.1	606.5	433.7	291.4	262.6	507.4	41.5	32.2	58.5
87.5°	25.4	29.6	204.2	347.3	213.5	132.2	157.6	178.7	14.4	17.8	16.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8	1724.8
2.5°	1690.9	1679.9	1645.1	1610.4	1570.6	1534.2	1505.4	1486.7	1495.2	1467.2	1471.5
5°	1642.6	1614.6	1538.4	1456.2	1367.3	1284.3	1218.2	1169.0	1159.7	1117.4	1119.1
7.5°	1596.0	1550.3	1426.6	1291.0	1143.6	1024.2	915.8	820.9	787.0	752.3	731.9
10°	1570.6	1507.9	1332.5	1135.2	927.6	752.3	599.8	480.3	430.3	393.9	376.1
12.5°	1578.2	1495.2	1262.2	993.7	720.9	498.1	338.9	251.6	221.1	204.2	198.2
15°	1603.6	1497.7	1198.7	855.6	524.4	301.6	199.1	170.3	167.7	166.9	166.0
17.5°	1627.3	1500.3	1131.8	711.6	350.7	192.3	160.1	157.6	157.6	157.6	157.6
20°	1651.9	1501.1	1058.1	560.8	230.4	157.6	150.8	149.1	150.8	150.8	150.8
22.5°	1680.7	1507.1	986.9	414.2	170.3	148.2	144.0	143.2	144.0	144.0	143.2
25°	1716.3	1519.8	909.8	296.5	154.2	142.3	138.1	137.2	138.1	137.2	137.2
27.5°	1763.7	1536.7	820.0	212.6	147.4	136.4	132.2	132.2	132.2	131.3	131.3
30°	1824.7	1557.0	699.7	167.7	140.6	130.5	127.1	127.1	126.2	125.4	125.4
32.5°	1912.0	1590.1	568.4	151.6	133.0	122.8	119.4	120.3	119.4	118.6	117.8
35°	2035.7	1641.7	438.8	143.2	125.4	115.2	111.8	111.8	111.8	110.1	110.1
37.5°	2211.0	1720.5	328.7	134.7	117.8	107.6	103.4	103.4	102.5	100.8	101.7
40°	2427.9	1819.6	238.0	127.1	110.1	99.1	95.7	94.0	92.3	90.6	90.6
42.5°	2688.8	1916.2	178.7	119.4	102.5	92.3	88.1	86.4	83.0	81.3	80.5
45°	2981.1	2018.7	148.2	110.1	94.0	84.7	81.3	77.9	73.7	71.2	70.3
47.5°	3227.6	2081.4	132.2	100.8	85.6	77.1	73.7	68.6	63.5	61.8	61.8
50°	3375.8	2055.2	118.6	91.5	77.1	69.5	65.2	58.5	55.1	53.4	52.5
52.5°	3458.9	1977.2	107.6	83.9	69.5	61.0	55.1	49.1	47.4	45.7	45.7
55°	3515.6	1864.5	95.7	76.2	62.7	53.4	46.6	42.4	40.7	39.8	39.0
57.5°	3569.8	1727.3	84.7	69.5	55.9	47.4	39.8	38.1	34.7	33.9	33.9
60°	3585.9	1538.4	74.5	61.8	50.0	41.5	34.7	32.2	28.8	28.0	28.0
62.5°	3380.9	1224.1	66.1	52.5	44.1	35.6	30.5	27.1	23.7	23.7	23.7
65°	2825.2	831.0	56.8	45.7	39.0	30.5	26.3	22.0	20.3	20.3	20.3
67.5°	1967.9	463.4	48.3	39.0	33.0	25.4	22.0	18.6	17.8	18.6	18.6
70°	887.0	183.8	40.7	32.2	27.1	21.2	18.6	16.1	17.8	17.8	17.8
72°	266.0	98.3	33.9	26.3	22.0	18.6	16.1	15.2	16.9	17.8	17.8
72.5°	197.4	88.1	32.2	25.4	22.0	17.8	15.2	15.2	16.9	17.8	17.8
75°	101.7	60.1	24.6	18.6	16.1	14.4	12.7	14.4	16.9	16.9	16.9
77.5°	79.6	49.1	20.3	14.4	13.6	12.7	11.9	13.6	15.2	15.2	15.2
80°	74.5	32.2	16.1	13.6	11.9	11.0	11.0	11.9	13.6	14.4	14.4
82.5°	75.4	26.3	14.4	12.7	11.0	10.2	10.2	11.0	12.7	13.6	13.6
85°	48.3	17.8	12.7	11.0	10.2	9.3	9.3	10.2	11.9	12.7	12.7
87.5°	16.1	13.6	11.0	10.2	8.5	8.5	8.5	8.5	10.2	11.0	11.9
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)