

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: P271312

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271312
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
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-SL2-7027-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8547.8 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 111
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

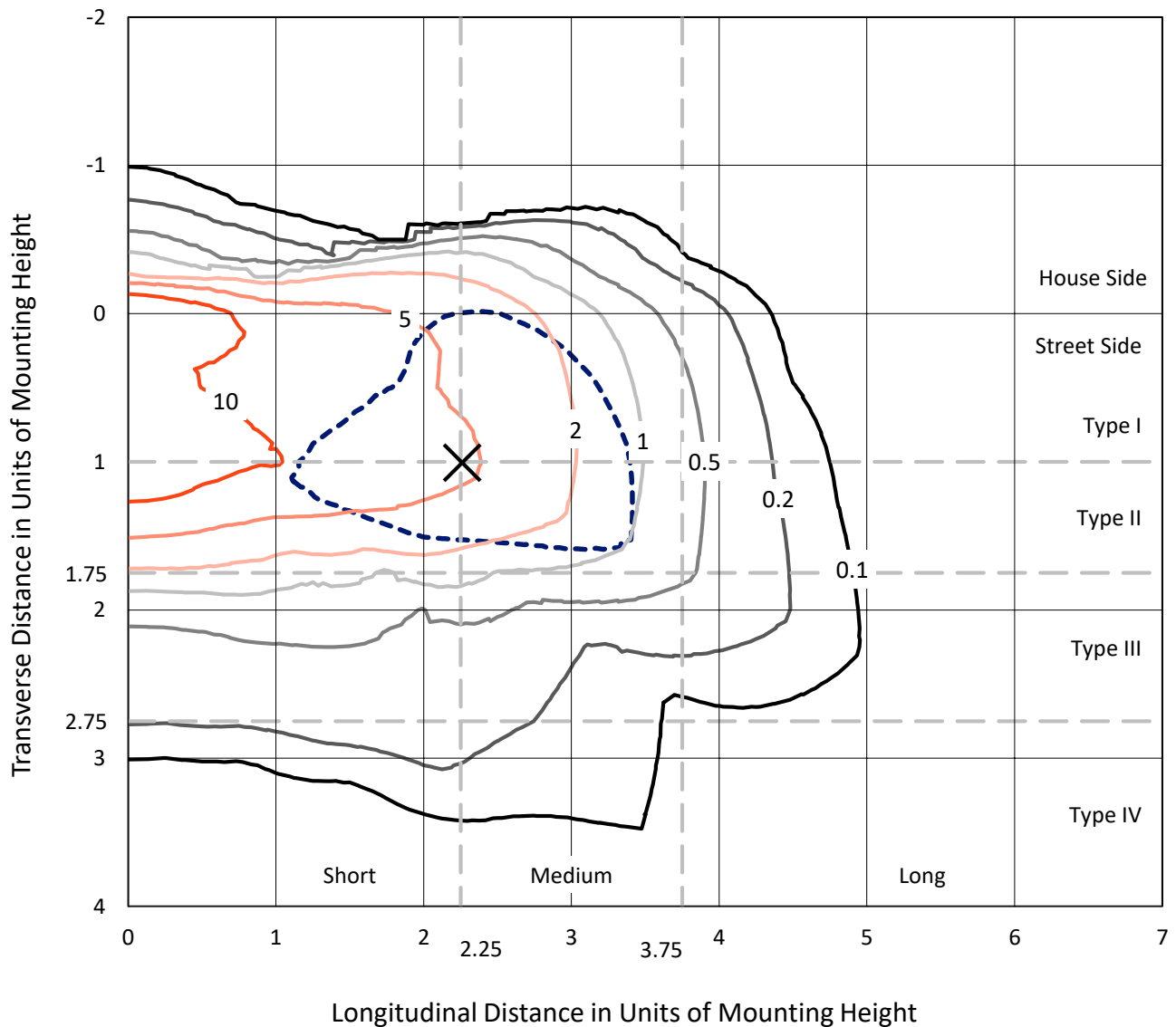


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

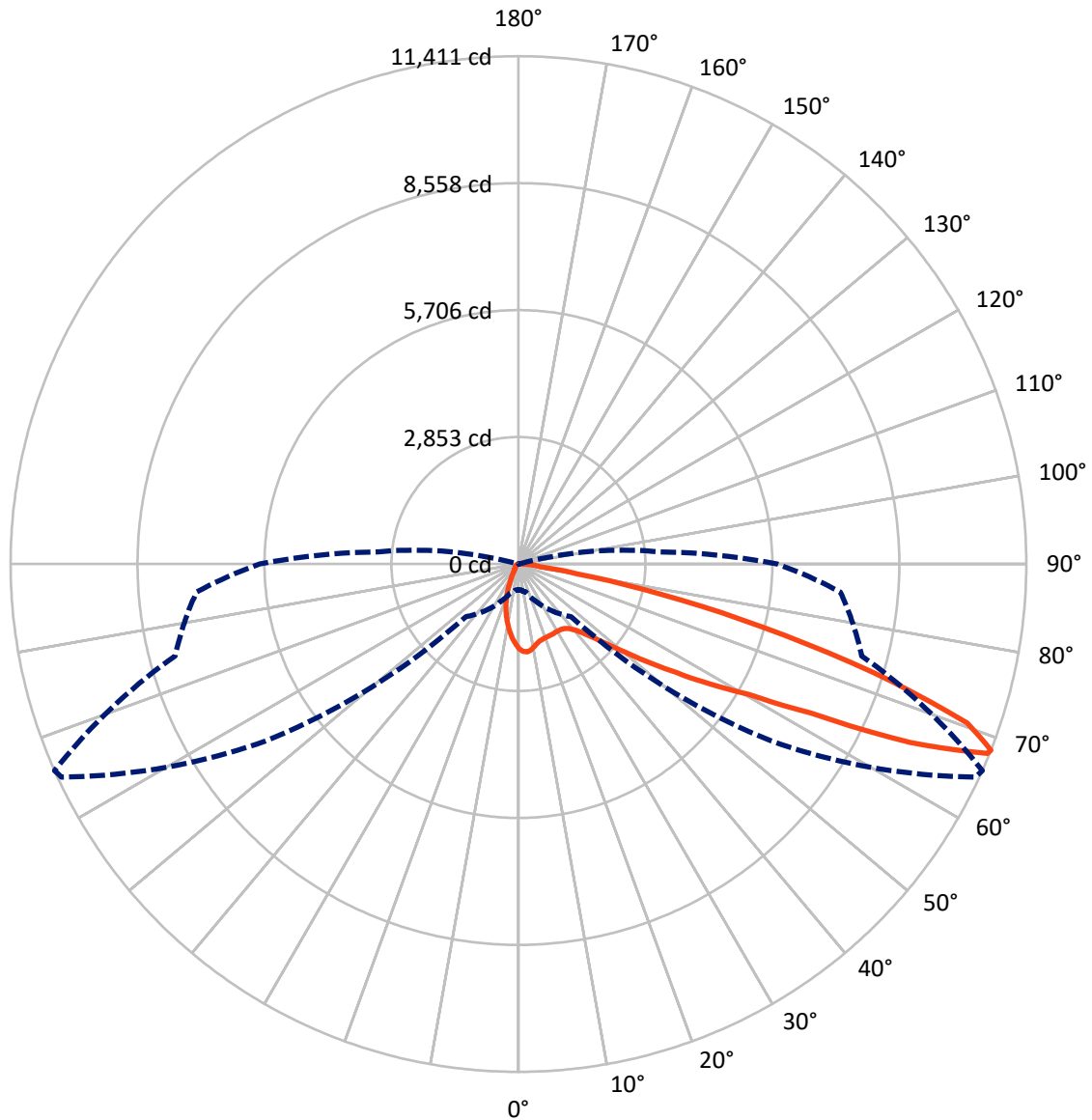


Based on 10 foot mounting height. Maximum calculated value = 19 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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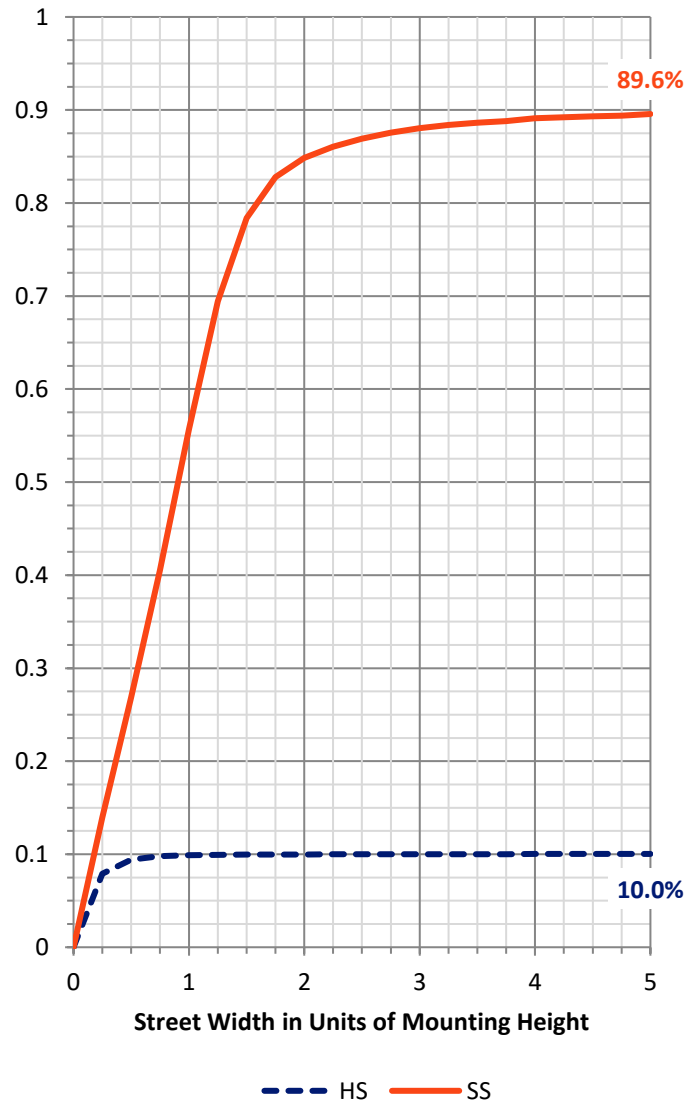
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	865.8	0.0	865.8
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	7681.9	0.0	7681.9
	% Fixture	89.9	0.0	89.9
Total	Lumens	8547.8	0.0	8547.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	1.8
10°-20°	335.9	3.9
20°-30°	486.8	5.7
30°-40°	745.1	8.7
40°-50°	1274.5	14.9
50°-60°	1993.7	23.3
60°-70°	2295.7	26.9
70°-80°	1148.8	13.4
80°-90°	111.3	1.3
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°	8547.8	100.0
0°-180°	8547.8	100.0

Coefficient of Utilization



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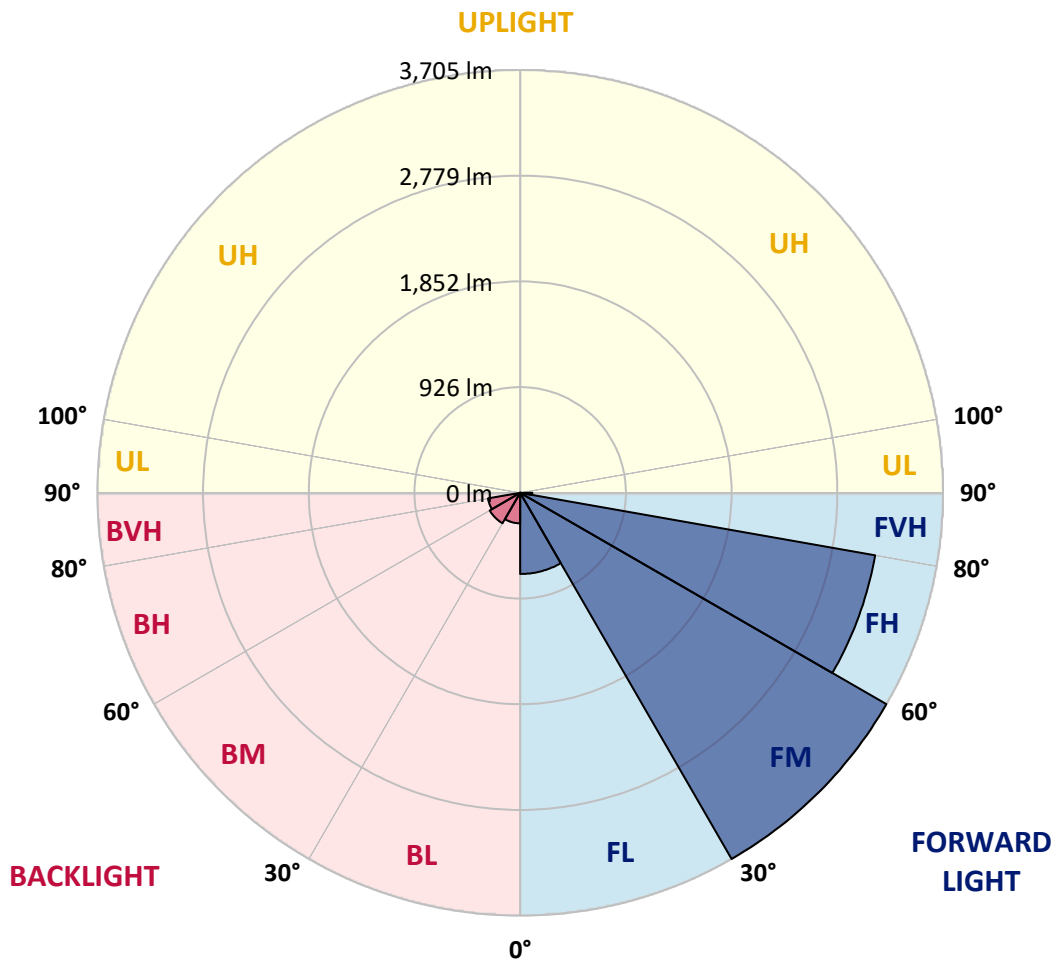
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	711.5	8.3			
FM	(30°-60°)	3705.0	43.3			
FH	(60°-80°)	3158.4	36.9			G2/5000
FVH	(80°-90°)	107.0	1.3			G2/225
BL	(0°-30°)	267.2	3.1	B1/500		
BM	(30°-60°)	308.3	3.6	B1/1000		
BH	(60°-80°)	286.1	3.3	B1/500		G1/500
BVH	(80°-90°)	4.2	0.0			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3
2.5°	2003.0	2004.4	2003.7	2005.6	2004.4	1994.2	1983.5	1960.7	1962.7	1933.2	1900.4
5°	1862.0	1873.4	1885.0	1896.3	1923.8	1948.0	1976.8	1983.5	1983.5	1958.0	1909.7
7.5°	1718.5	1719.1	1731.9	1747.4	1784.3	1828.5	1895.7	1956.0	1957.3	1964.1	1911.1
10°	1610.4	1613.7	1622.5	1639.2	1676.1	1719.8	1795.0	1889.6	1897.0	1946.6	1897.6
12.5°	1526.6	1530.6	1540.0	1559.5	1593.1	1638.0	1717.1	1825.1	1835.2	1929.9	1893.5
15°	1462.1	1467.6	1474.8	1494.4	1530.6	1578.2	1664.7	1782.2	1794.4	1923.1	1906.4
17.5°	1435.3	1435.3	1434.7	1448.1	1484.3	1532.6	1623.1	1759.4	1774.8	1928.5	1927.9
20°	1446.7	1444.7	1430.6	1427.2	1449.3	1497.7	1590.3	1744.7	1762.0	1938.6	1954.1
22.5°	1507.0	1503.0	1471.6	1445.4	1438.6	1470.9	1568.3	1734.5	1755.4	1959.4	1988.8
25°	1635.3	1623.1	1579.6	1520.6	1467.6	1464.1	1552.7	1729.1	1751.3	1983.5	2027.1
27.5°	1801.7	1798.3	1728.6	1649.4	1547.4	1486.3	1548.0	1725.1	1747.4	2001.0	2057.9
30°	2008.4	2009.7	1929.2	1825.8	1671.4	1548.7	1562.8	1723.2	1745.9	2002.3	2071.4
32.5°	2221.8	2223.0	2156.0	2045.4	1841.3	1656.0	1604.5	1732.7	1753.4	1996.9	2070.8
35°	2427.1	2429.0	2388.9	2299.7	2068.1	1805.1	1683.0	1764.8	1779.5	2000.3	2069.4
37.5°	2686.8	2694.8	2645.1	2562.0	2352.7	2023.8	1811.2	1829.8	1842.0	2027.8	2079.4
40°	3129.7	3118.8	2976.7	2835.7	2661.3	2290.1	1996.3	1942.0	1946.0	2098.9	2117.8
42.5°	3645.6	3632.2	3388.6	3145.8	2978.7	2611.6	2233.1	2113.7	2113.1	2218.4	2200.9
45°	4089.9	4081.8	3825.5	3501.4	3330.2	2966.6	2525.0	2361.4	2353.3	2425.1	2352.7
47.5°	4405.3	4398.6	4204.5	3879.8	3736.9	3357.1	2889.4	2698.9	2682.1	2695.5	2598.8
50°	4436.1	4428.7	4360.9	4152.2	4212.1	3930.2	3339.7	3141.1	3119.5	3098.8	2971.2
52.5°	4147.6	4146.8	4182.5	4169.0	4544.9	4667.7	3891.8	3687.9	3662.4	3609.4	3482.5
55°	3557.7	3554.5	3689.2	3885.2	4537.3	5428.5	4734.1	4338.9	4305.2	4199.2	4032.9
57.5°	2599.5	2582.1	2863.8	3279.3	4218.7	5761.4	6071.4	5147.4	5091.8	4755.4	4499.3
60°	1435.3	1442.0	1804.3	2296.2	3463.9	5695.7	7302.1	6090.1	5943.8	5235.3	4977.0
62.5°	804.5	821.3	1091.1	1492.4	2208.4	5162.1	7962.2	7712.7	7360.4	5795.0	5580.9
65°	608.6	618.8	754.2	1151.4	1392.4	3607.5	8067.7	9981.3	9677.4	6643.1	6542.4
67.5°	573.1	581.2	647.6	954.9	1268.2	1870.8	7274.6	11323.5	11361.8	7800.0	7287.3
68°	577.2	587.1	653.5	918.6	1266.3	1673.5	6936.4	11330.1	11411.3	7986.6	7261.8
70°	530.1	532.8	691.2	901.2	1227.4	1318.5	5017.9	10553.7	10699.4	8208.6	6592.1
72.5°	202.7	203.3	310.1	780.4	1285.7	1326.0	2527.7	8341.4	8348.8	7143.7	5139.4
75°	105.3	88.6	97.2	244.2	1228.0	1292.4	1268.2	5695.7	5660.0	4831.4	3149.1
77.5°	72.5	61.8	65.0	84.5	510.6	1291.8	915.9	3275.2	3267.9	2055.3	898.5
80°	41.0	35.6	38.9	71.1	179.1	1212.5	853.5	1407.9	1326.5	360.9	145.6
82.5°	20.8	17.4	20.8	59.6	111.4	762.9	830.0	552.3	491.8	85.9	94.6
85°	5.4	5.4	10.2	41.6	69.1	250.3	744.2	398.6	358.3	37.5	67.2
87.5°	1.3	0.7	4.0	15.5	24.9	54.3	412.7	222.2	191.2	19.5	38.9
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°	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3	1904.3
2.5°	1886.9	1868.1	1831.3	1789.7	1760.0	1727.9	1709.0	1686.3	1668.8	1653.4	1664.7
5°	1880.2	1844.0	1762.0	1670.2	1593.1	1519.3	1464.1	1411.9	1372.3	1347.4	1357.5
7.5°	1862.7	1809.0	1676.1	1532.6	1406.4	1287.7	1191.1	1104.5	1037.5	1001.3	1012.6
10°	1833.3	1757.4	1579.0	1379.5	1203.1	1035.3	891.7	762.9	665.6	620.0	630.8
12.5°	1811.7	1711.8	1478.3	1231.9	999.9	761.7	571.1	423.5	347.6	302.0	306.1
15°	1802.4	1676.1	1384.3	1076.3	777.8	489.1	308.7	223.5	197.3	187.8	188.6
17.5°	1803.6	1648.0	1295.0	914.7	553.5	281.2	189.3	170.5	166.5	164.4	164.4
20°	1807.0	1619.9	1202.6	746.2	354.3	181.2	157.7	151.6	149.7	147.0	147.6
22.5°	1817.1	1598.4	1109.1	577.2	218.1	147.6	139.5	134.1	130.9	126.8	127.5
25°	1832.5	1582.3	1017.3	415.3	153.7	128.8	121.5	114.1	108.1	103.3	104.1
27.5°	1842.0	1559.5	919.2	283.1	127.5	112.7	102.6	92.5	85.9	81.8	81.1
30°	1835.2	1522.5	807.9	185.9	112.7	97.2	85.2	73.8	67.2	63.7	63.7
32.5°	1817.1	1474.8	685.0	135.6	100.0	83.9	69.1	59.1	54.3	52.3	53.0
35°	1796.3	1425.3	554.3	114.8	89.9	71.1	56.4	48.2	46.4	45.6	45.6
37.5°	1784.9	1382.3	428.9	104.1	80.5	59.1	46.4	41.6	39.5	39.5	39.5
40°	1797.7	1349.4	317.5	95.9	71.1	49.0	38.9	35.6	34.9	34.9	34.9
42.5°	1852.0	1338.0	232.2	89.2	61.8	41.0	33.5	30.8	30.3	30.8	30.8
45°	1958.0	1362.9	175.8	82.6	53.0	33.5	28.8	26.8	26.8	27.5	27.5
47.5°	2137.8	1426.6	144.3	75.8	44.2	28.1	24.9	23.4	23.4	24.2	24.2
50°	2417.0	1544.6	129.5	68.5	36.9	24.2	20.8	20.1	20.1	20.8	21.5
52.5°	2841.1	1769.5	122.1	61.1	30.3	20.1	17.4	16.8	17.4	18.1	18.1
55°	3312.8	2057.4	113.4	53.7	25.5	16.8	14.2	14.2	14.7	16.1	16.1
57.5°	3752.3	2335.1	105.3	44.2	22.2	13.5	11.4	11.4	12.8	14.2	14.2
60°	4216.6	2607.6	94.6	35.6	18.8	10.7	9.4	9.4	11.4	12.8	13.5
62.5°	4790.4	2924.3	80.5	28.1	14.7	8.1	6.6	8.8	10.7	12.8	12.8
65°	5619.7	3318.2	63.2	22.2	11.4	6.1	5.4	8.1	10.2	12.0	12.8
67.5°	5921.1	3267.9	47.6	18.1	8.8	4.8	4.8	7.4	10.2	12.0	12.0
68°	5811.0	3157.8	45.6	17.4	8.1	4.8	4.8	7.4	10.2	12.0	12.0
70°	5063.4	2581.4	37.5	13.5	6.6	4.0	4.0	6.6	10.2	11.4	12.0
72.5°	3791.2	1715.1	32.2	8.8	6.1	4.0	3.4	6.6	9.4	11.4	11.4
75°	2174.7	711.9	27.5	6.6	5.4	3.4	3.4	6.1	9.4	11.4	11.4
77.5°	614.7	166.5	22.2	5.4	4.8	3.4	2.6	6.1	8.8	10.7	10.7
80°	112.7	49.6	17.4	4.8	4.0	3.4	2.6	6.1	8.8	10.7	10.7
82.5°	74.5	23.4	12.8	4.8	4.0	3.4	2.6	5.4	8.1	10.2	10.2
85°	55.7	16.8	8.1	4.8	4.0	3.4	2.6	5.4	8.1	10.2	10.2
87.5°	30.8	7.4	6.1	5.4	4.8	3.4	2.6	4.8	7.4	9.4	9.4
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)