

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: P198853

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198853
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-SL2-7050-800-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 800mA 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: 7948 lumens
Efficiency: N/A
Efficacy: 93.5 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): 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

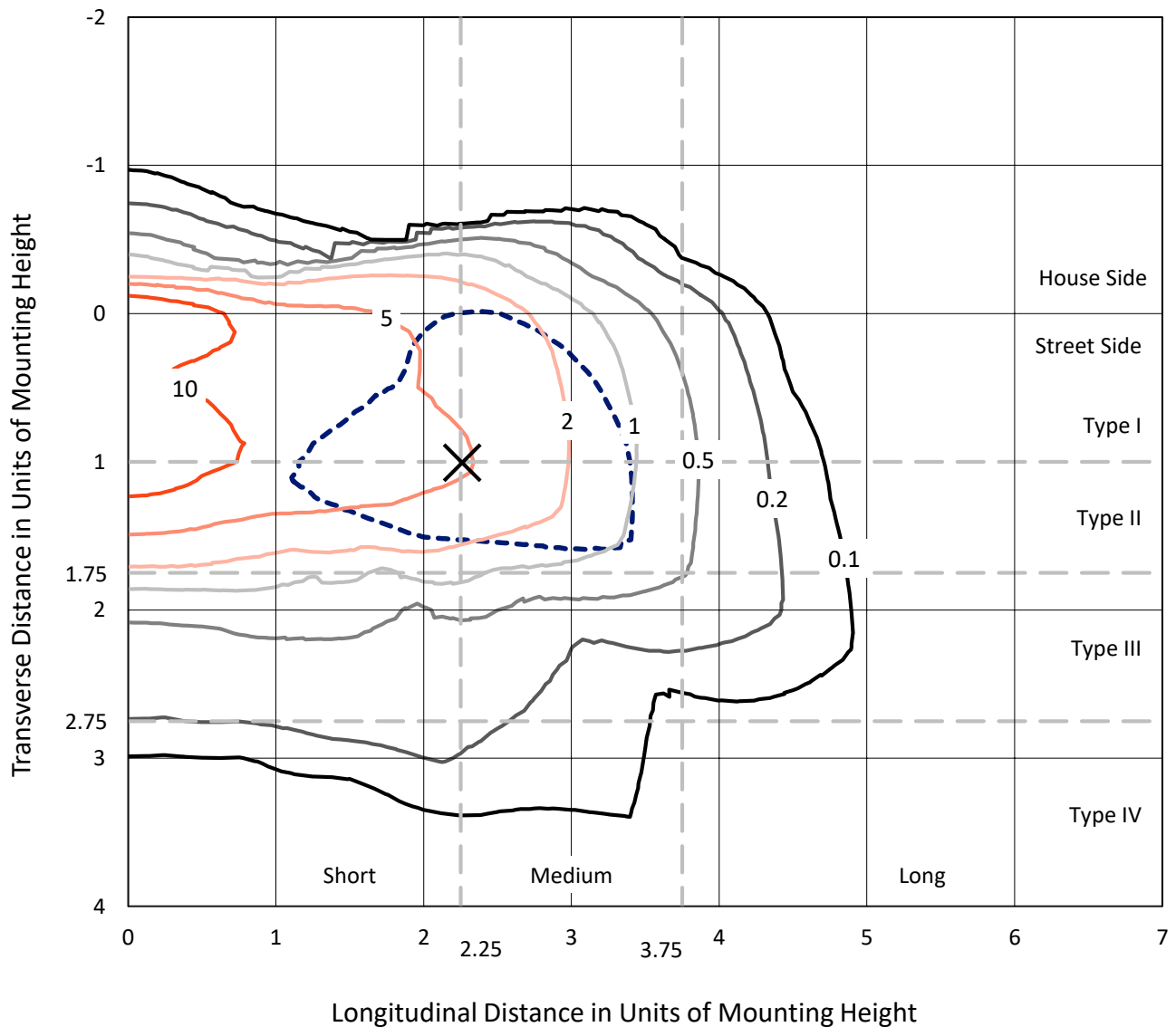


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

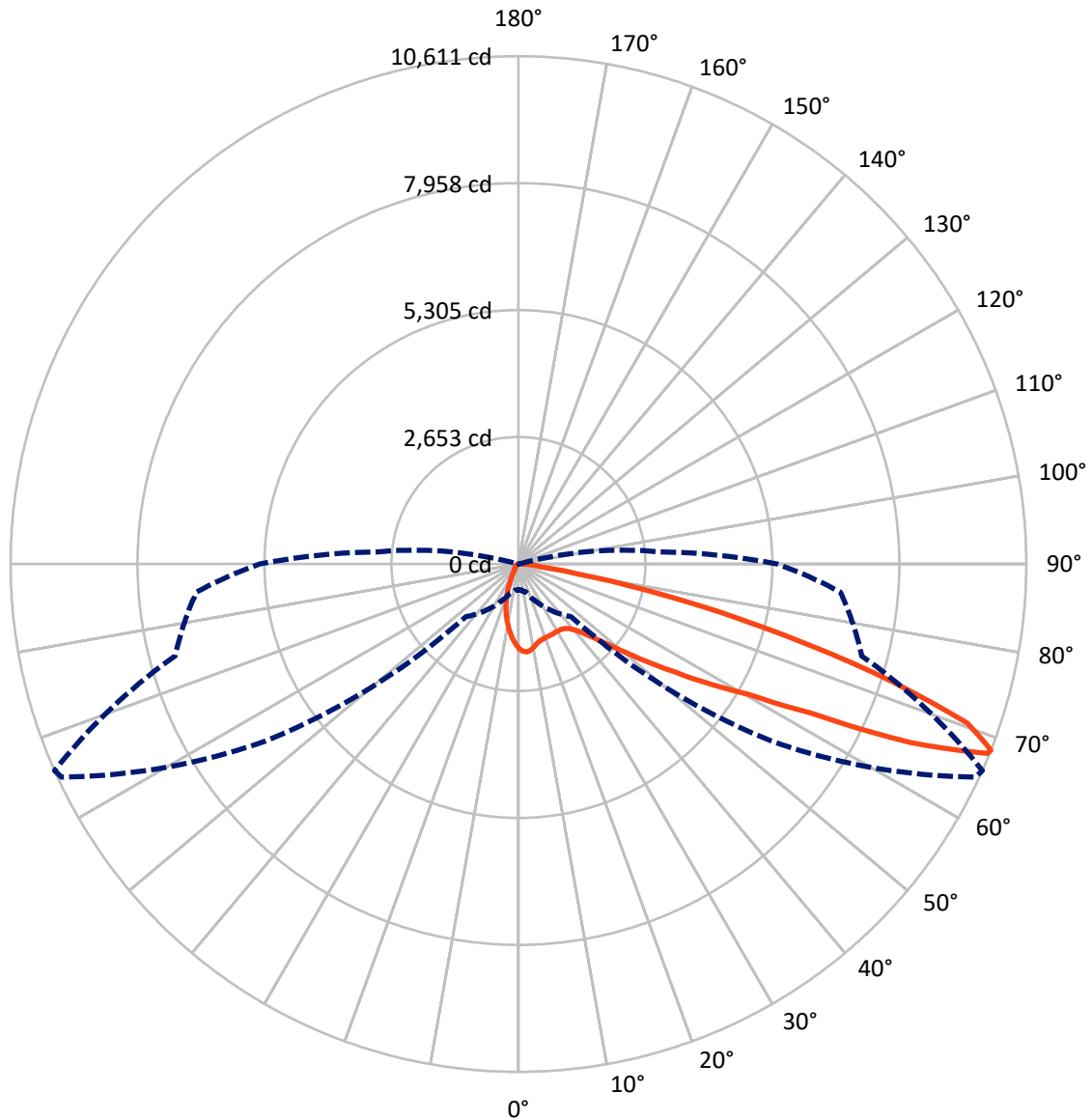


Based on 10 foot mounting height. Maximum calculated value = 17.7 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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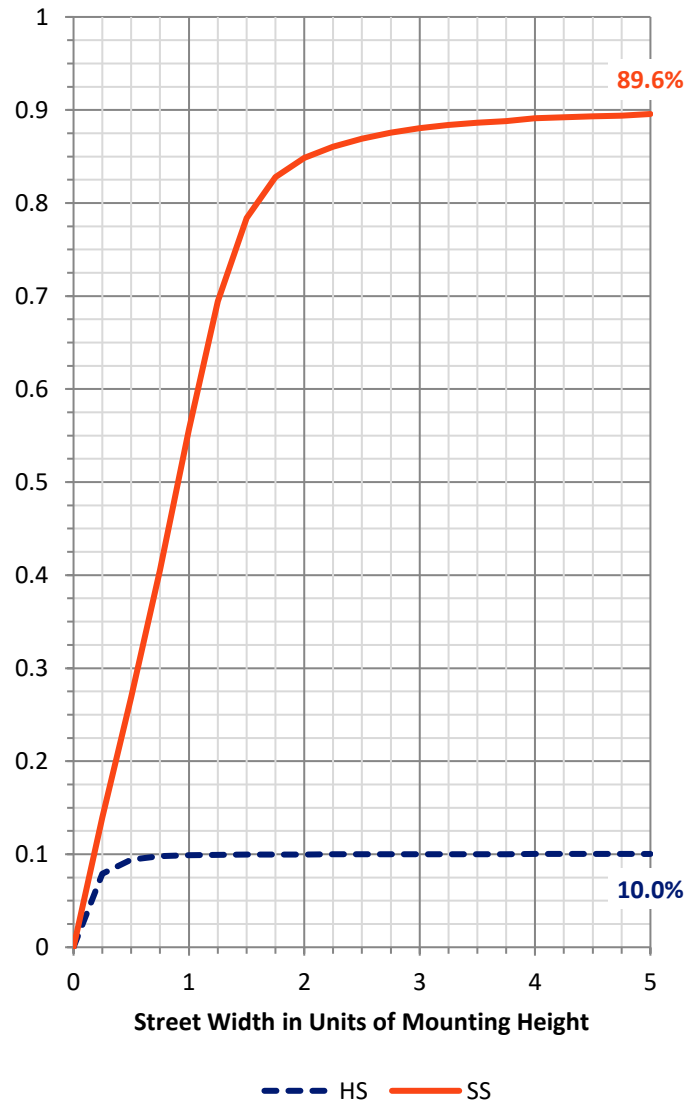
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	805.0	0.0	805.0
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	7143.0	0.0	7143.0
	% Fixture	89.9	0.0	89.9
Total	Lumens	7948.0	0.0	7948.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	1.8
10°-20°	312.3	3.9
20°-30°	452.6	5.7
30°-40°	692.8	8.7
40°-50°	1185.1	14.9
50°-60°	1853.8	23.3
60°-70°	2134.6	26.9
70°-80°	1068.2	13.4
80°-90°	103.5	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°	7948.0	100.0
0°-180°	7948.0	100.0



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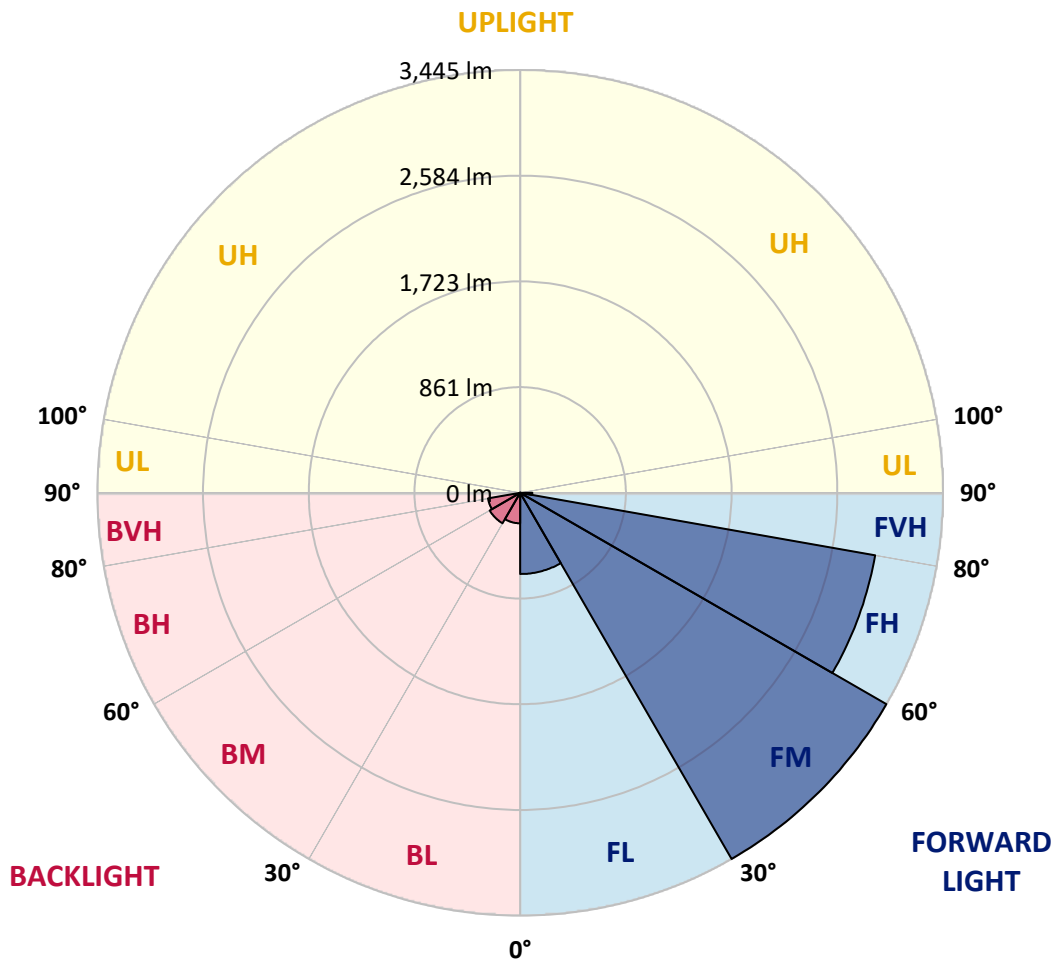
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	661.6	8.3			
FM (30°-60°)	3445.0	43.3			
FH (60°-80°)	2936.8	36.9			G2/5000
FVH (80°-90°)	99.5	1.3			G1/100
BL (0°-30°)	248.5	3.1	B1/500		
BM (30°-60°)	286.7	3.6	B1/1000		
BH (60°-80°)	266.0	3.3	B1/500		G1/500
BVH (80°-90°)	3.9	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°	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7
2.5°	1862.5	1863.7	1863.1	1865.0	1863.7	1854.3	1844.4	1823.2	1825.0	1797.6	1767.0
5°	1731.4	1742.0	1752.6	1763.3	1788.8	1811.3	1838.1	1844.4	1844.4	1820.7	1775.7
7.5°	1597.9	1598.5	1610.4	1624.7	1659.1	1700.2	1762.6	1818.8	1820.0	1826.3	1777.0
10°	1497.5	1500.6	1508.7	1524.3	1558.6	1599.2	1669.0	1757.0	1763.9	1810.0	1764.5
12.5°	1419.5	1423.2	1431.9	1450.0	1481.2	1523.0	1596.7	1697.1	1706.5	1794.4	1760.8
15°	1359.6	1364.6	1371.4	1389.5	1423.2	1467.5	1548.0	1657.2	1668.4	1788.2	1772.6
17.5°	1334.6	1334.6	1334.0	1346.5	1380.2	1425.1	1509.3	1636.0	1650.3	1793.2	1792.6
20°	1345.2	1343.3	1330.2	1327.1	1347.7	1392.6	1478.7	1622.2	1638.5	1802.6	1816.9
22.5°	1401.4	1397.6	1368.3	1344.0	1337.7	1367.7	1458.1	1612.9	1632.2	1821.9	1849.4
25°	1520.5	1509.3	1468.8	1413.8	1364.6	1361.4	1443.8	1607.9	1628.5	1844.4	1884.9
27.5°	1675.3	1672.2	1607.3	1533.6	1438.8	1382.0	1439.4	1604.1	1624.7	1860.6	1913.6
30°	1867.4	1868.7	1793.8	1697.7	1554.2	1440.1	1453.2	1602.3	1623.5	1861.8	1926.1
32.5°	2065.9	2067.1	2004.7	1901.8	1712.1	1539.9	1491.8	1611.0	1630.4	1856.8	1925.5
35°	2256.8	2258.7	2221.2	2138.2	1923.0	1678.4	1564.8	1641.0	1654.7	1860.0	1924.2
37.5°	2498.3	2505.7	2459.6	2382.2	2187.5	1881.8	1684.0	1701.5	1712.7	1885.5	1933.6
40°	2910.1	2900.1	2767.8	2636.8	2474.5	2129.5	1856.2	1805.7	1809.4	1951.7	1969.2
42.5°	3389.9	3377.4	3150.9	2925.0	2769.7	2428.4	2076.5	1965.4	1964.8	2062.7	2046.5
45°	3802.9	3795.4	3557.1	3255.7	3096.6	2758.4	2347.9	2195.6	2188.2	2254.9	2187.5
47.5°	4096.2	4089.9	3909.6	3607.6	3474.7	3121.6	2686.7	2509.5	2493.9	2506.4	2416.5
50°	4124.9	4118.0	4055.0	3860.9	3916.5	3654.4	3105.3	2920.7	2900.7	2881.4	2762.8
52.5°	3856.6	3855.9	3889.0	3876.5	4225.9	4340.1	3618.8	3429.2	3405.5	3356.2	3238.2
55°	3308.1	3305.0	3430.4	3612.6	4219.1	5047.7	4401.9	4034.4	4003.2	3904.6	3749.9
57.5°	2417.1	2400.9	2663.0	3049.2	3922.7	5357.1	5645.4	4786.2	4734.5	4421.9	4183.5
60°	1334.6	1340.8	1677.8	2135.1	3220.8	5296.0	6789.7	5662.9	5526.9	4868.0	4627.8
62.5°	748.1	763.7	1014.5	1387.6	2053.4	4800.0	7403.7	7171.6	6844.0	5388.3	5189.3
65°	565.9	575.3	701.3	1070.7	1294.7	3354.3	7501.6	9281.1	8998.5	6177.0	6083.4
67.5°	532.8	540.3	602.1	887.9	1179.2	1739.5	6764.1	10529.0	10564.5	7252.7	6776.0
68°	536.6	545.9	607.7	854.2	1177.4	1556.1	6449.7	10535.2	10610.7	7426.1	6752.3
70°	492.9	495.4	642.7	838.0	1141.2	1226.0	4665.8	9813.3	9948.7	7632.6	6129.6
72.5°	188.4	189.1	288.3	725.6	1195.5	1232.9	2350.4	7756.2	7763.1	6642.5	4778.7
75°	98.0	82.4	90.5	227.1	1141.8	1201.7	1179.2	5296.0	5262.9	4492.4	2928.1
77.5°	67.4	57.4	60.5	78.6	474.8	1201.1	851.7	3045.4	3038.6	1911.1	835.5
80°	38.1	33.1	36.2	66.1	166.6	1127.5	793.7	1309.0	1233.5	335.7	135.4
82.5°	19.3	16.2	19.3	55.5	103.6	709.4	771.8	513.5	457.3	79.9	88.0
85°	5.0	5.0	9.4	38.7	64.3	232.7	691.9	370.6	333.2	34.9	62.4
87.5°	1.2	0.6	3.7	14.4	23.1	50.5	383.7	206.5	177.8	18.1	36.2
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°	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7	1770.7
2.5°	1754.5	1737.0	1702.7	1664.0	1636.6	1606.6	1589.2	1568.0	1551.7	1537.4	1548.0
5°	1748.3	1714.6	1638.5	1553.0	1481.2	1412.6	1361.4	1312.8	1276.0	1252.9	1262.2
7.5°	1732.1	1682.1	1558.6	1425.1	1307.8	1197.3	1107.5	1027.0	964.6	930.9	941.5
10°	1704.6	1634.1	1468.1	1282.8	1118.7	962.7	829.2	709.4	618.9	576.5	586.5
12.5°	1684.6	1591.7	1374.5	1145.6	929.7	708.2	531.0	393.7	323.2	280.8	284.5
15°	1675.9	1558.6	1287.2	1000.8	723.1	454.9	287.0	207.8	183.4	174.7	175.3
17.5°	1677.1	1532.4	1204.2	850.4	514.7	261.4	176.0	158.5	154.7	152.9	152.9
20°	1680.3	1506.2	1118.1	693.8	329.4	168.5	146.6	141.0	139.1	136.6	137.3
22.5°	1689.6	1486.2	1031.4	536.6	202.8	137.3	129.8	124.8	121.7	117.9	118.5
25°	1704.0	1471.2	945.9	386.2	142.9	119.8	112.9	106.1	100.5	96.1	96.7
27.5°	1712.7	1450.0	854.8	263.3	118.5	104.8	95.5	86.1	79.9	76.1	75.5
30°	1706.5	1415.7	751.2	172.8	104.8	90.5	79.2	68.6	62.4	59.3	59.3
32.5°	1689.6	1371.4	637.0	126.0	93.0	78.0	64.3	54.9	50.5	48.7	49.3
35°	1670.3	1325.2	515.4	106.7	83.6	66.1	52.4	44.9	43.1	42.4	42.4
37.5°	1659.7	1285.3	398.7	96.7	74.9	54.9	43.1	38.7	36.8	36.8	36.8
40°	1671.5	1254.7	295.1	89.2	66.1	45.5	36.2	33.1	32.4	32.4	32.4
42.5°	1722.1	1244.1	215.9	83.0	57.4	38.1	31.2	28.7	28.1	28.7	28.7
45°	1820.7	1267.2	163.5	76.7	49.3	31.2	26.8	25.0	25.0	25.6	25.6
47.5°	1987.9	1326.5	134.1	70.5	41.2	26.2	23.1	21.8	21.8	22.5	22.5
50°	2247.4	1436.3	120.4	63.6	34.3	22.5	19.3	18.7	18.7	19.3	20.0
52.5°	2641.8	1645.3	113.6	56.8	28.1	18.7	16.2	15.6	16.2	16.8	16.8
55°	3080.4	1913.0	105.4	49.9	23.7	15.6	13.1	13.1	13.7	15.0	15.0
57.5°	3489.1	2171.3	98.0	41.2	20.6	12.5	10.6	10.6	11.9	13.1	13.1
60°	3920.8	2424.6	88.0	33.1	17.5	10.0	8.7	8.7	10.6	11.9	12.5
62.5°	4454.3	2719.1	74.9	26.2	13.7	7.5	6.2	8.1	10.0	11.9	11.9
65°	5225.5	3085.4	58.7	20.6	10.6	5.6	5.0	7.5	9.4	11.2	11.9
67.5°	5505.6	3038.6	44.3	16.8	8.1	4.4	4.4	6.9	9.4	11.2	11.2
68°	5403.3	2936.3	42.4	16.2	7.5	4.4	4.4	6.9	9.4	11.2	11.2
70°	4708.2	2400.3	34.9	12.5	6.2	3.7	3.7	6.2	9.4	10.6	11.2
72.5°	3525.3	1594.8	29.9	8.1	5.6	3.7	3.1	6.2	8.7	10.6	10.6
75°	2022.2	662.0	25.6	6.2	5.0	3.1	3.1	5.6	8.7	10.6	10.6
77.5°	571.5	154.7	20.6	5.0	4.4	3.1	2.5	5.6	8.1	10.0	10.0
80°	104.8	46.2	16.2	4.4	3.7	3.1	2.5	5.6	8.1	10.0	10.0
82.5°	69.3	21.8	11.9	4.4	3.7	3.1	2.5	5.0	7.5	9.4	9.4
85°	51.8	15.6	7.5	4.4	3.7	3.1	2.5	5.0	7.5	9.4	9.4
87.5°	28.7	6.9	5.6	5.0	4.4	3.1	2.5	4.4	6.9	8.7	8.7
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)