

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: P270832

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270832
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: NVN-AF-02-LED-U-SL2-7027-HSS
Description: NAVION 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: 8633.1 lumens
Efficiency: N/A
Efficacy: 76.4 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): 113
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

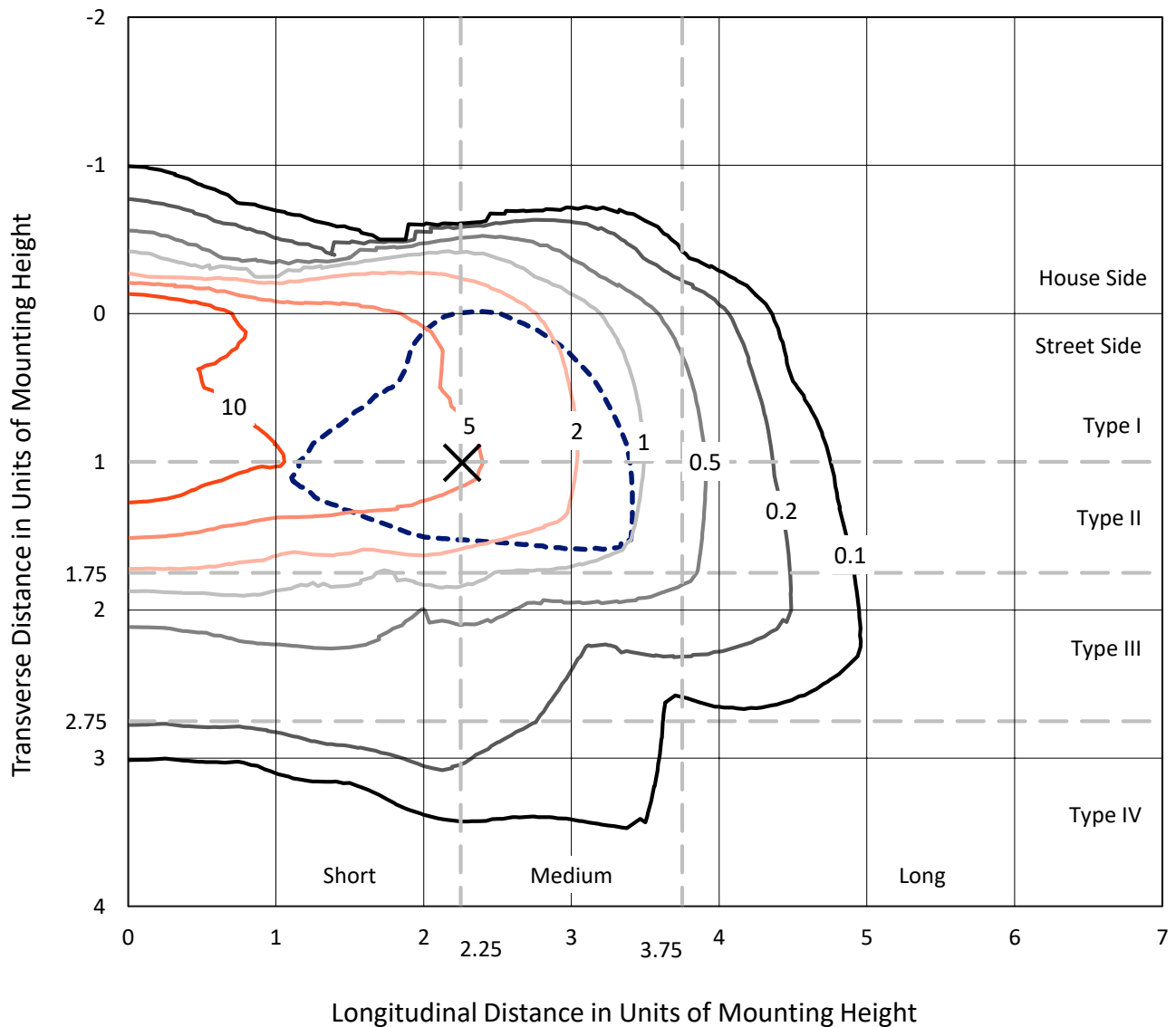


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Iso-Footcandle Lines of Horizontal Illumination

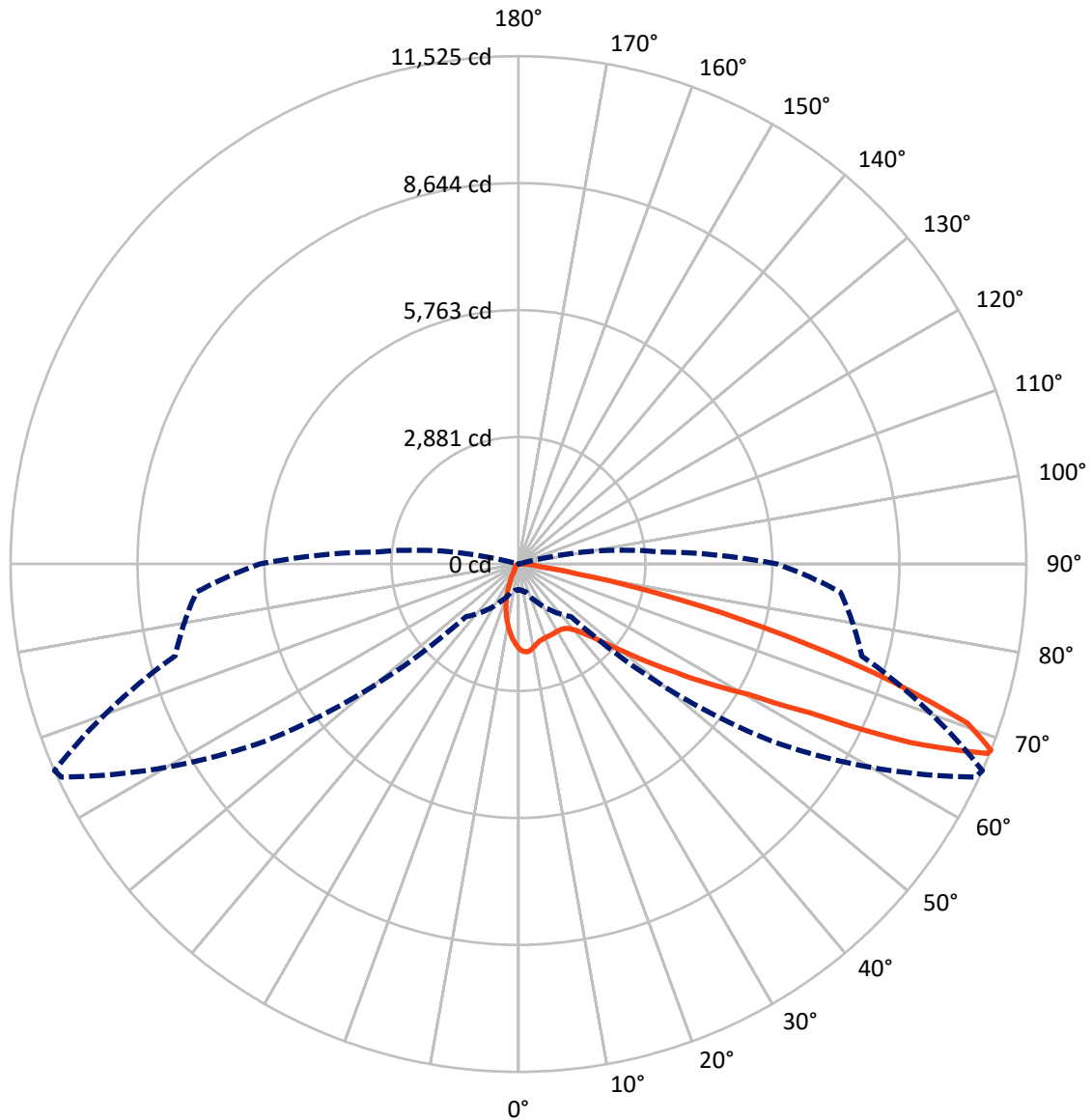
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 19.2 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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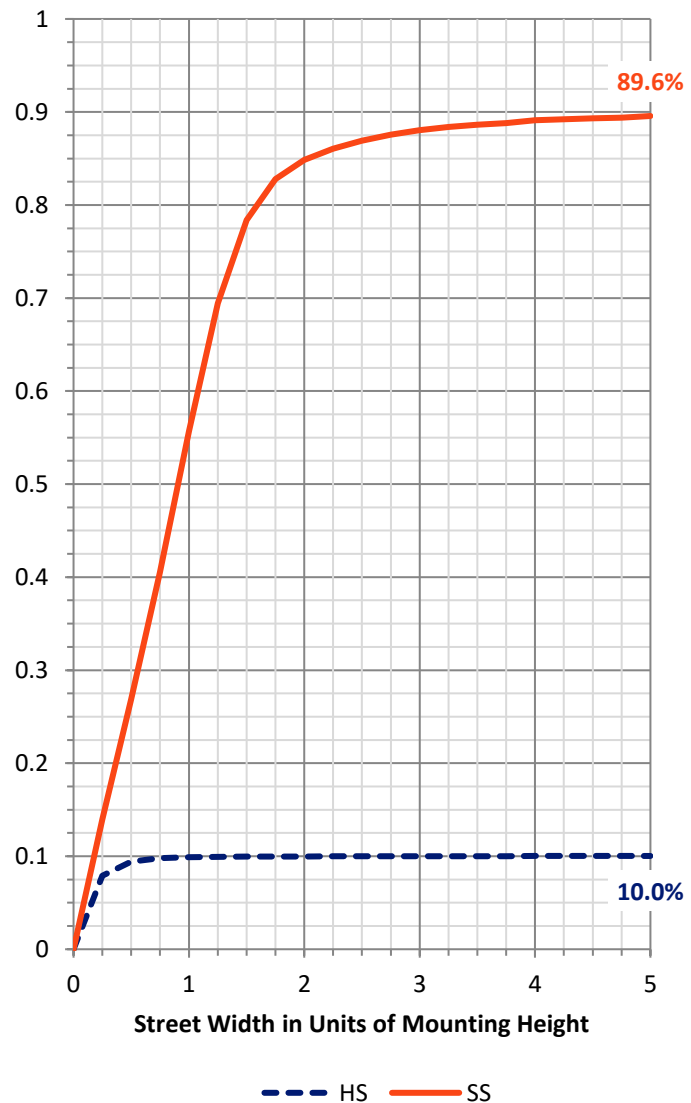
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	874.5	0.0	874.5
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	7758.7	0.0	7758.7
	% Fixture	89.9	0.0	89.9
Total	Lumens	8633.1	0.0	8633.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	1.8
10°-20°	339.3	3.9
20°-30°	491.6	5.7
30°-40°	752.6	8.7
40°-50°	1287.2	14.9
50°-60°	2013.6	23.3
60°-70°	2318.6	26.9
70°-80°	1160.3	13.4
80°-90°	112.4	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°	8633.1	100.0
0°-180°	8633.1	100.0

Coefficient of Utilization



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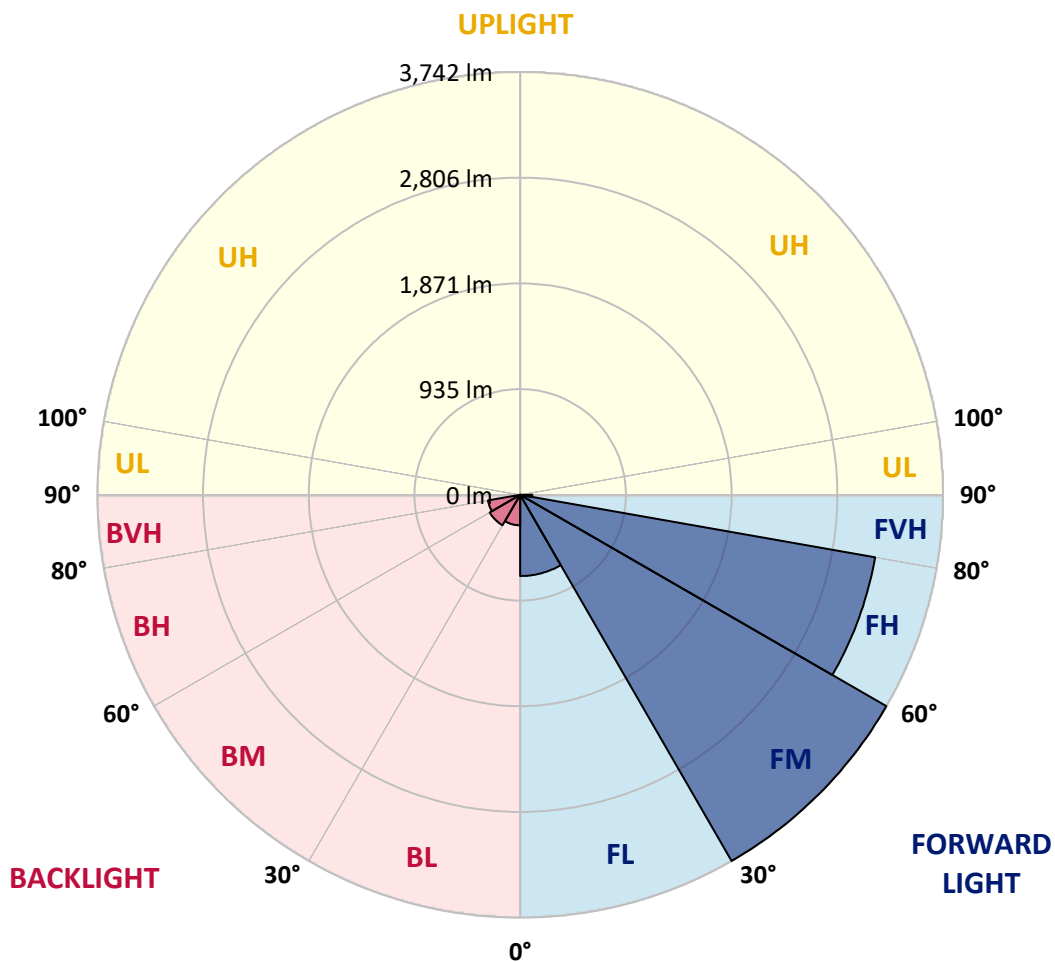
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	718.7	8.3			
FM	(30°-60°)	3742.0	43.3			
FH	(60°-80°)	3189.9	36.9			G2/5000
FVH	(80°-90°)	108.1	1.3			G2/225
BL	(0°-30°)	269.9	3.1	B1/500		
BM	(30°-60°)	311.4	3.6	B1/1000		
BH	(60°-80°)	288.9	3.3	B1/500		G1/500
BVH	(80°-90°)	4.3	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°	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5
2.5°	2023.1	2024.4	2023.7	2025.7	2024.4	2014.2	2003.3	1980.4	1982.3	1952.6	1919.3
5°	1880.7	1892.2	1903.7	1915.2	1943.0	1967.4	1996.6	2003.3	2003.3	1977.6	1928.8
7.5°	1735.6	1736.3	1749.2	1764.8	1802.1	1846.7	1914.6	1975.6	1976.9	1983.6	1930.2
10°	1626.6	1630.0	1638.8	1655.7	1692.9	1737.1	1812.9	1908.4	1915.9	1966.1	1916.7
12.5°	1541.9	1546.0	1555.3	1575.0	1609.0	1654.3	1734.3	1843.4	1853.6	1949.1	1912.5
15°	1476.8	1482.2	1489.6	1509.3	1546.0	1594.0	1681.4	1800.1	1812.2	1942.3	1925.3
17.5°	1449.7	1449.7	1449.0	1462.5	1499.1	1547.9	1639.3	1776.9	1792.6	1947.7	1947.0
20°	1461.2	1459.1	1445.0	1441.5	1463.9	1512.7	1606.2	1762.0	1779.7	1957.9	1973.5
22.5°	1522.2	1518.0	1486.2	1459.8	1453.1	1485.5	1583.8	1752.0	1773.0	1979.0	2008.8
25°	1651.7	1639.3	1595.4	1535.7	1482.2	1478.8	1568.3	1746.5	1768.9	2003.3	2047.3
27.5°	1819.6	1816.4	1745.9	1665.8	1562.8	1501.2	1563.5	1742.4	1764.8	2020.9	2078.6
30°	2028.5	2029.8	1948.5	1844.1	1688.3	1564.2	1578.4	1740.3	1763.5	2022.4	2092.2
32.5°	2244.0	2245.4	2177.5	2065.7	1859.8	1672.6	1620.5	1749.9	1770.9	2017.0	2091.4
35°	2451.4	2453.4	2412.7	2322.6	2088.6	1823.1	1699.8	1782.3	1797.2	2020.3	2090.0
37.5°	2713.6	2721.8	2671.6	2587.6	2376.0	2044.1	1829.2	1848.2	1860.3	2048.0	2100.2
40°	3160.9	3150.0	3006.4	2864.1	2687.9	2313.0	2016.2	1961.3	1965.4	2119.9	2138.9
42.5°	3682.1	3668.5	3422.5	3177.1	3008.5	2637.8	2255.5	2134.8	2134.2	2240.6	2222.9
45°	4130.8	4122.6	3863.7	3536.4	3363.6	2996.1	2550.3	2384.9	2376.7	2449.3	2376.0
47.5°	4449.2	4442.5	4246.6	3918.5	3774.1	3390.7	2918.2	2725.7	2708.8	2722.5	2624.8
50°	4480.4	4473.0	4404.5	4193.7	4254.1	3969.4	3373.0	3172.5	3150.7	3129.8	3001.0
52.5°	4188.9	4188.3	4224.2	4210.6	4590.2	4714.2	3930.9	3724.7	3699.0	3645.5	3517.4
55°	3593.3	3589.8	3726.1	3923.9	4582.8	5482.7	4781.3	4382.1	4348.2	4241.2	4073.2
57.5°	2625.4	2607.9	2892.5	3312.1	4260.8	5819.0	6132.0	5198.9	5142.5	4803.0	4544.2
60°	1449.7	1456.4	1822.4	2319.2	3498.4	5752.4	7374.9	6151.1	6003.3	5287.7	5026.6
62.5°	812.5	829.6	1102.0	1507.3	2230.4	5213.8	8041.8	7789.7	7434.0	5852.7	5636.7
65°	614.7	624.9	761.8	1162.9	1406.2	3643.4	8148.3	10081.0	9774.1	6709.4	6607.8
67.5°	578.8	587.0	654.0	964.4	1281.0	1889.4	7347.1	11436.5	11475.2	7877.9	7360.1
68°	582.8	593.1	660.2	927.8	1278.8	1690.3	7005.6	11443.4	11525.3	8066.2	7334.3
70°	535.4	538.2	698.1	910.3	1239.5	1331.7	5068.0	10659.2	10806.3	8290.5	6658.0
72.5°	204.6	205.4	313.1	788.3	1298.5	1339.2	2553.0	8424.8	8432.2	7215.0	5190.6
75°	106.4	89.4	98.3	246.7	1240.2	1305.2	1281.0	5752.4	5716.5	4879.7	3180.5
77.5°	73.2	62.3	65.8	85.3	515.7	1304.6	925.1	3308.0	3300.6	2075.9	907.5
80°	41.3	35.9	39.3	71.9	181.0	1224.7	862.1	1421.8	1339.8	364.6	147.1
82.5°	21.0	17.6	21.0	60.4	112.5	770.6	838.4	557.8	496.8	86.7	95.6
85°	5.4	5.4	10.2	42.0	69.8	252.9	751.6	402.6	361.8	38.0	67.8
87.5°	1.3	0.7	4.0	15.6	25.1	54.8	416.9	224.3	193.1	19.7	39.3
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°	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5	1923.5
2.5°	1905.8	1886.8	1849.5	1807.5	1777.7	1745.1	1726.2	1703.1	1685.5	1669.9	1681.4
5°	1898.9	1862.4	1779.7	1686.8	1609.0	1534.3	1478.8	1425.9	1385.9	1360.8	1371.1
7.5°	1881.4	1827.2	1692.9	1547.9	1420.5	1300.6	1203.0	1115.5	1047.8	1011.1	1022.7
10°	1851.5	1775.0	1594.8	1393.5	1215.1	1045.7	900.7	770.6	672.3	626.2	637.1
12.5°	1829.8	1728.9	1493.1	1244.3	1009.9	769.2	576.7	427.7	351.1	305.0	309.0
15°	1820.3	1692.9	1398.1	1087.0	785.5	494.1	311.7	225.7	199.2	189.7	190.4
17.5°	1821.8	1664.5	1308.0	923.7	559.1	284.0	191.1	172.1	168.1	166.0	166.0
20°	1825.0	1636.1	1214.5	753.6	357.9	183.0	159.3	153.3	151.2	148.4	149.1
22.5°	1835.2	1614.3	1120.2	582.8	220.3	149.1	140.9	135.6	132.1	128.1	128.7
25°	1850.9	1598.1	1027.4	419.5	155.1	130.2	122.7	115.3	109.1	104.4	105.0
27.5°	1860.3	1575.0	928.5	286.0	128.7	113.8	103.7	93.6	86.7	82.6	82.0
30°	1853.6	1537.8	816.0	187.7	113.8	98.3	86.1	74.6	67.8	64.4	64.4
32.5°	1835.2	1489.6	692.0	136.9	101.0	84.7	69.8	59.6	54.8	52.9	53.5
35°	1814.2	1439.4	559.9	115.9	90.8	71.9	57.0	48.8	46.7	46.2	46.2
37.5°	1802.8	1396.1	433.1	105.0	81.3	59.6	46.7	42.0	40.0	40.0	40.0
40°	1815.7	1362.9	320.5	96.8	71.9	49.4	39.3	35.9	35.3	35.3	35.3
42.5°	1870.5	1351.4	234.5	90.1	62.3	41.3	33.9	31.3	30.5	31.3	31.3
45°	1977.6	1376.5	177.5	83.4	53.5	33.9	29.1	27.0	27.0	27.8	27.8
47.5°	2159.3	1440.8	145.7	76.5	44.7	28.4	25.1	23.7	23.7	24.4	24.4
50°	2441.1	1560.1	130.9	69.1	37.3	24.4	21.0	20.3	20.3	21.0	21.6
52.5°	2869.5	1787.2	123.3	61.7	30.5	20.3	17.6	17.0	17.6	18.2	18.2
55°	3345.8	2077.9	114.5	54.2	25.7	17.0	14.3	14.3	14.9	16.3	16.3
57.5°	3789.8	2358.5	106.4	44.7	22.4	13.6	11.5	11.5	12.8	14.3	14.3
60°	4258.9	2633.7	95.6	35.9	19.0	10.8	9.5	9.5	11.5	12.8	13.6
62.5°	4838.2	2953.4	81.3	28.4	14.9	8.2	6.7	8.9	10.8	12.8	12.8
65°	5675.9	3351.3	63.7	22.4	11.5	6.1	5.4	8.2	10.2	12.1	12.8
67.5°	5980.2	3300.6	48.1	18.2	8.9	4.8	4.8	7.5	10.2	12.1	12.1
68°	5869.0	3189.3	46.2	17.6	8.2	4.8	4.8	7.5	10.2	12.1	12.1
70°	5114.1	2607.2	38.0	13.6	6.7	4.0	4.0	6.7	10.2	11.5	12.1
72.5°	3829.1	1732.2	32.5	8.9	6.1	4.0	3.5	6.7	9.5	11.5	11.5
75°	2196.4	719.1	27.8	6.7	5.4	3.5	3.5	6.1	9.5	11.5	11.5
77.5°	620.8	168.1	22.4	5.4	4.8	3.5	2.8	6.1	8.9	10.8	10.8
80°	113.8	50.1	17.6	4.8	4.0	3.5	2.8	6.1	8.9	10.8	10.8
82.5°	75.2	23.7	12.8	4.8	4.0	3.5	2.8	5.4	8.2	10.2	10.2
85°	56.2	17.0	8.2	4.8	4.0	3.5	2.8	5.4	8.2	10.2	10.2
87.5°	31.3	7.5	6.1	5.4	4.8	3.5	2.8	4.8	7.5	9.5	9.5
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)