

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: P271320

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271320
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
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-SL3-7027-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8894.2 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-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

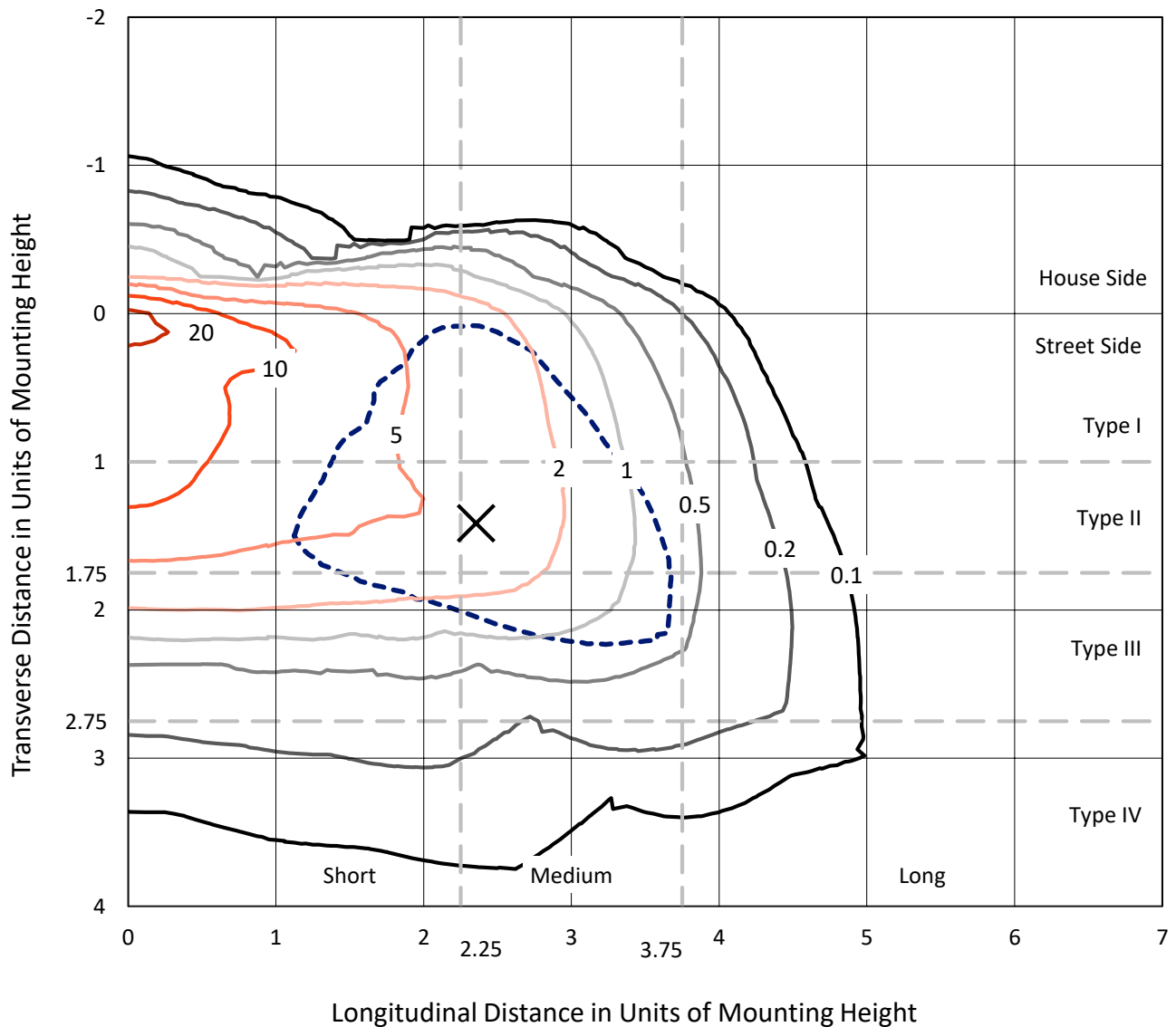


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

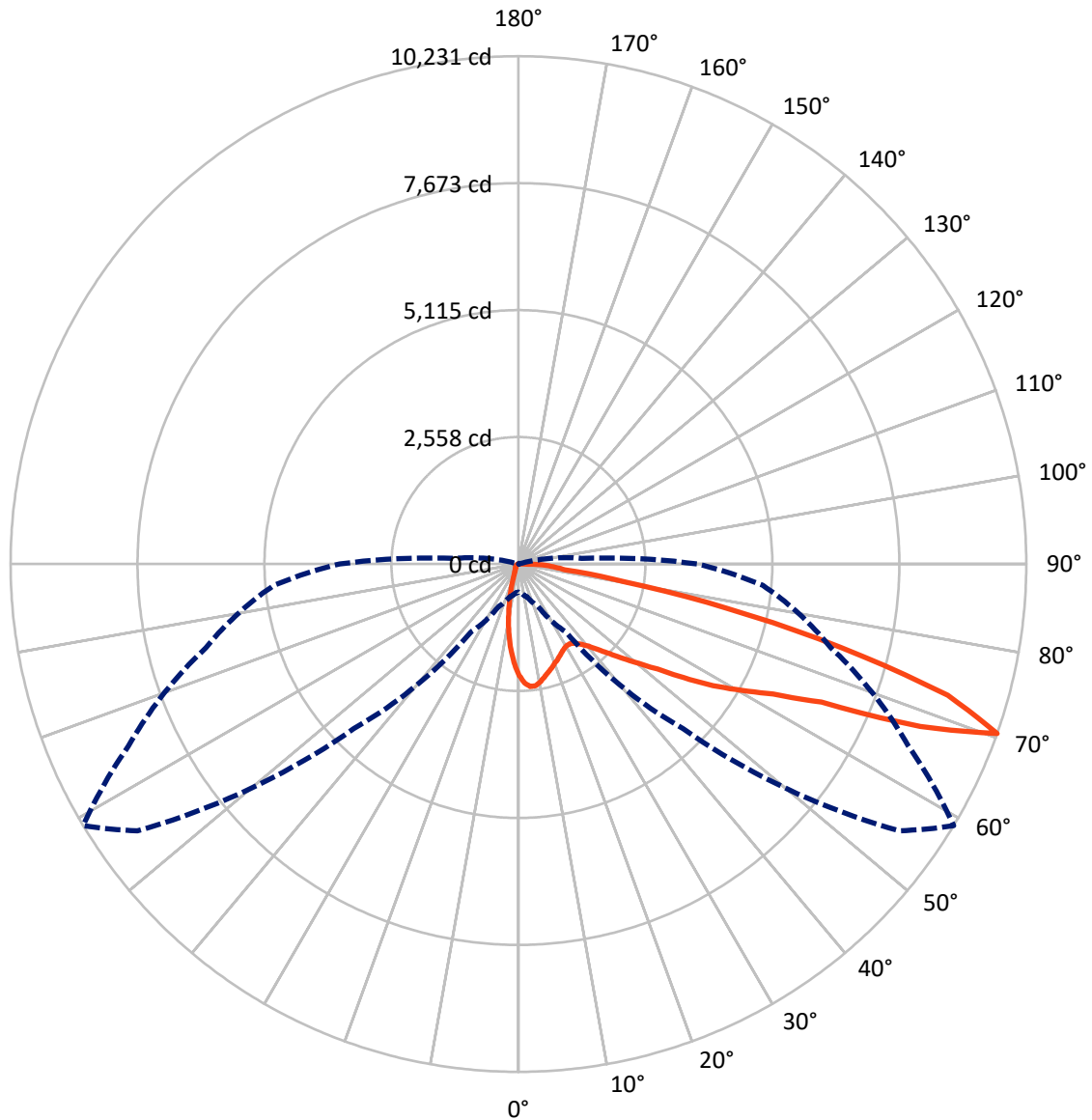


Based on 10 foot mounting height. Maximum calculated value = 23.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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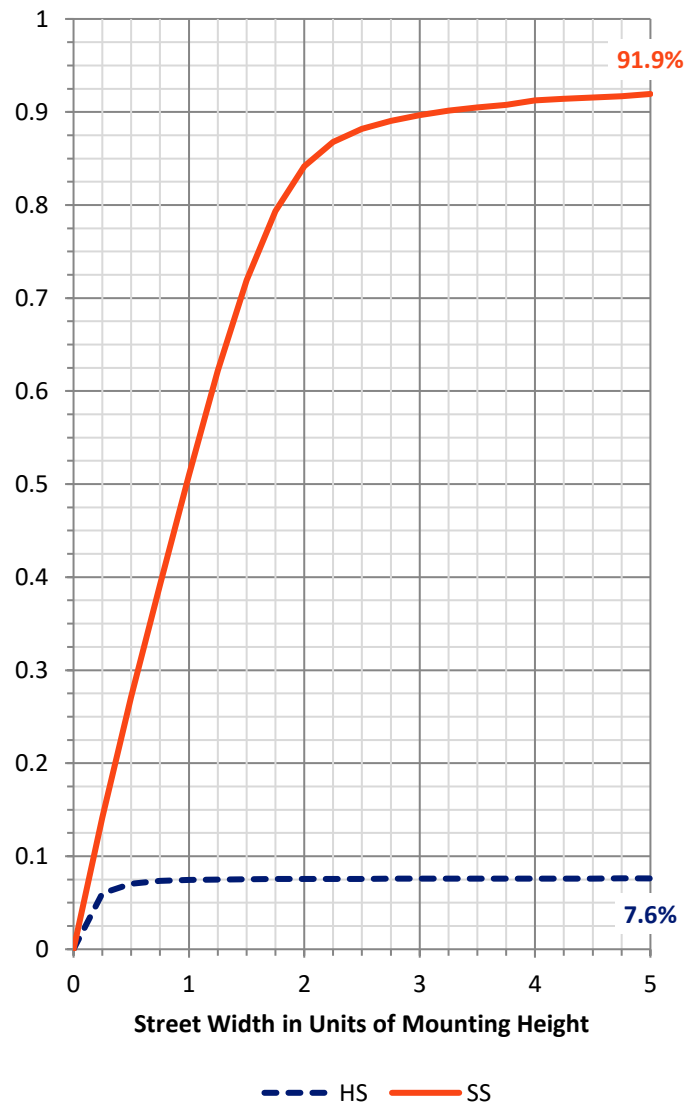
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	683.7	0.0	683.7
	% Fixture	7.7	0.0	7.7
Street Side	Lumens	8210.5	0.0	8210.5
	% Fixture	92.3	0.0	92.3
Total	Lumens	8894.2	0.0	8894.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	2.1
10°-20°	387.9	4.4
20°-30°	525.1	5.9
30°-40°	757.8	8.5
40°-50°	1258.5	14.1
50°-60°	1925.0	21.6
60°-70°	2394.2	26.9
70°-80°	1323.5	14.9
80°-90°	137.3	1.5
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°	8894.2	100.0
0°-180°	8894.2	100.0

Coefficient of Utilization



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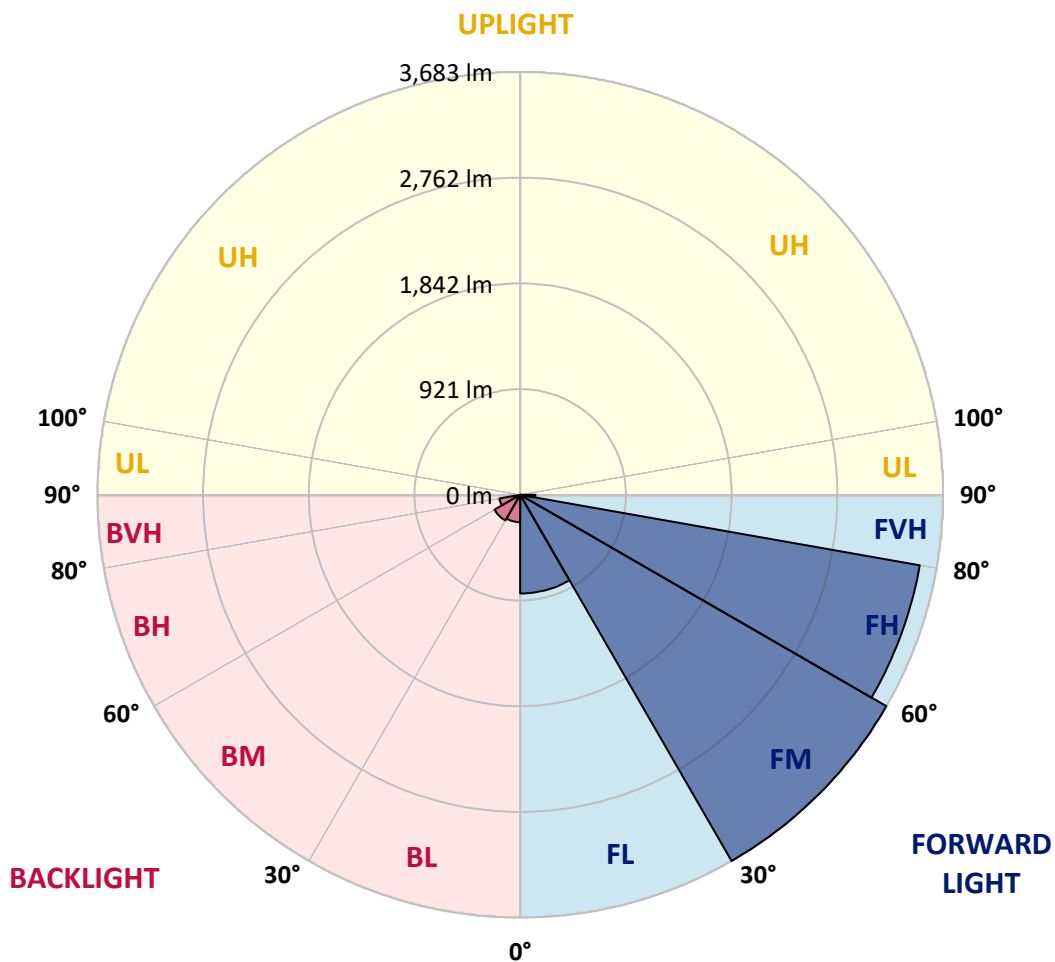
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	859.6	9.7			
FM	(30°-60°)	3683.2	41.4			
FH	(60°-80°)	3534.4	39.7			G2/5000
FVH	(80°-90°)	133.3	1.5			G2/225
BL	(0°-30°)	238.3	2.7	B1/500		
BM	(30°-60°)	258.1	2.9	B1/1000		
BH	(60°-80°)	183.4	2.1	B1/500		G1/500
BVH	(80°-90°)	4.0	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0
2.5°	2542.3	2538.3	2521.5	2518.0	2499.3	2461.7	2418.1	2400.6	2365.1	2308.7	2246.3
5°	2584.6	2586.5	2587.8	2580.6	2577.7	2547.0	2498.6	2477.9	2430.2	2337.6	2223.6
7.5°	2426.1	2431.5	2448.3	2455.6	2487.9	2500.0	2489.9	2476.4	2438.9	2329.6	2169.1
10°	2259.1	2269.2	2287.3	2299.3	2338.9	2371.2	2412.0	2415.5	2407.4	2302.6	2108.1
12.5°	2115.5	2124.9	2145.1	2169.1	2209.4	2251.1	2312.1	2333.5	2360.3	2285.3	2064.6
15°	1992.0	1994.7	2014.2	2044.5	2097.5	2154.4	2226.9	2258.3	2310.7	2278.6	2031.0
17.5°	1884.0	1884.7	1897.4	1925.0	1989.3	2064.6	2149.0	2190.6	2257.1	2269.2	2001.5
20°	1812.9	1812.2	1812.9	1827.6	1884.7	1973.9	2076.6	2120.2	2205.3	2257.7	1971.2
22.5°	1788.7	1785.4	1770.0	1764.6	1800.8	1879.3	2002.1	2059.2	2159.2	2254.3	1949.1
25°	1818.3	1816.3	1783.3	1752.6	1755.8	1804.9	1926.2	1996.0	2122.9	2266.5	1943.8
27.5°	1913.5	1909.4	1859.2	1798.9	1760.6	1769.3	1869.9	1943.0	2093.9	2296.0	1951.1
30°	2038.3	2039.1	1985.3	1912.2	1822.3	1772.6	1839.8	1908.9	2074.5	2340.3	1967.2
32.5°	2177.2	2176.6	2138.3	2053.7	1939.0	1834.3	1853.2	1911.6	2077.3	2405.3	1998.1
35°	2320.9	2313.4	2300.6	2226.2	2092.1	1942.3	1914.2	1957.1	2105.4	2491.2	2050.4
37.5°	2486.6	2483.9	2496.6	2418.1	2281.2	2101.4	2021.5	2050.4	2176.6	2618.0	2134.9
40°	2750.3	2735.5	2741.4	2634.8	2494.7	2315.4	2171.8	2179.3	2290.0	2785.7	2268.5
42.5°	3252.8	3193.0	3080.9	2881.0	2729.4	2553.0	2368.4	2355.6	2450.2	2989.1	2444.3
45°	3853.3	3784.7	3502.3	3152.8	2964.2	2807.9	2611.4	2577.1	2647.6	3231.4	2671.0
47.5°	4354.4	4280.7	3906.3	3436.6	3203.0	3070.9	2880.3	2840.1	2883.6	3512.5	2943.4
50°	4525.5	4484.6	4155.9	3672.8	3444.0	3366.2	3217.9	3150.7	3161.6	3815.7	3261.4
52.5°	4447.1	4433.0	4213.0	3834.4	3666.7	3692.3	3587.7	3517.1	3505.0	4147.1	3613.1
55°	4281.3	4274.7	4167.2	3924.3	3863.3	3990.8	4106.2	4045.2	3931.2	4499.4	3903.6
57.5°	4044.4	4070.0	4147.1	4097.4	4104.9	4306.1	4588.0	4619.4	4449.0	4779.8	4119.0
60°	3411.8	3480.3	3833.7	4283.4	4627.4	4830.8	5103.9	5163.0	4887.9	4971.7	4367.9
62.5°	2522.1	2620.0	3123.9	3949.8	4915.3	5828.6	5790.2	5764.2	5306.6	5228.8	4820.8
65°	1481.5	1596.2	2022.3	3086.3	4481.3	6470.0	7071.7	6709.5	5944.7	5762.7	5542.1
67.5°	738.0	738.8	931.3	1629.0	3311.8	6022.4	8942.4	8733.1	7301.2	6549.8	5826.5
70°	567.5	583.1	689.1	946.8	1674.7	4690.6	9371.2	10230.6	8664.6	6514.9	4943.6
72.5°	481.0	491.2	613.3	823.9	1252.0	2575.1	8112.5	9043.1	8268.1	5504.5	3644.0
75°	346.1	354.2	542.8	747.4	1152.6	1277.5	5564.8	6706.7	6203.5	3872.1	2005.5
77.5°	85.9	85.2	189.3	606.5	1031.3	1064.1	3193.0	4300.7	3559.4	1585.5	515.3
80°	38.3	36.9	42.9	127.5	959.5	1004.5	1404.3	2171.8	1365.3	256.9	157.7
82.5°	26.8	25.5	26.8	47.0	320.8	931.9	848.8	941.3	499.8	87.9	67.2
85°	8.8	8.1	14.7	39.5	89.9	537.5	828.0	703.2	371.7	37.5	44.9
87.5°	1.3	1.3	5.4	21.5	26.2	179.1	485.8	487.2	167.1	22.2	20.1
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°	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0	2249.0
2.5°	2214.9	2175.2	2119.6	2063.9	2013.6	1961.9	1920.2	1900.9	1892.1	1880.1	1853.8
5°	2163.7	2092.1	1970.0	1849.8	1737.7	1630.5	1538.4	1486.2	1429.8	1427.0	1399.6
7.5°	2081.9	1980.0	1787.4	1600.9	1429.8	1266.2	1125.1	1033.9	971.5	932.6	905.9
10°	1990.7	1859.9	1604.9	1342.5	1109.8	890.9	709.9	591.8	519.9	483.7	462.9
12.5°	1918.2	1753.9	1425.2	1094.9	803.2	552.2	383.8	297.9	259.7	244.9	238.2
15°	1855.9	1656.6	1256.6	873.6	536.1	317.3	222.2	193.9	187.8	187.8	187.1
17.5°	1792.7	1562.6	1093.0	656.2	337.6	208.0	175.1	171.0	171.8	173.8	173.8
20°	1733.1	1473.4	935.2	467.7	221.4	166.4	159.0	157.7	159.7	162.4	161.7
22.5°	1684.7	1394.9	787.8	321.4	170.4	150.9	146.2	144.3	145.5	147.6	147.0
25°	1650.5	1327.9	652.2	224.0	148.3	137.5	132.2	129.4	128.2	129.4	128.8
27.5°	1629.7	1271.5	524.7	168.4	132.9	124.1	117.4	112.1	108.7	108.7	107.3
30°	1616.3	1218.5	411.3	139.5	120.2	110.8	101.2	94.0	88.6	87.2	86.5
32.5°	1615.6	1172.7	307.3	123.4	108.1	97.2	85.9	76.4	70.4	69.1	68.5
35°	1632.4	1135.8	226.2	111.4	97.2	84.5	71.8	61.8	56.4	56.4	55.7
37.5°	1676.1	1114.4	171.0	102.0	88.6	73.8	60.4	51.1	46.4	47.6	47.6
40°	1757.3	1110.5	139.5	94.6	81.1	64.4	49.0	41.6	39.5	41.6	41.6
42.5°	1881.3	1131.9	124.1	89.2	74.5	55.1	41.0	35.6	34.9	36.9	36.9
45°	2043.0	1174.2	115.4	84.5	67.2	45.6	34.2	30.8	30.3	32.9	32.9
47.5°	2238.9	1231.1	107.3	79.2	59.6	37.5	28.8	26.2	26.2	28.8	29.6
50°	2471.1	1308.3	99.4	73.8	53.7	31.5	24.2	22.2	22.7	25.5	26.2
52.5°	2738.2	1403.0	91.9	69.1	47.0	25.5	20.1	18.8	19.5	22.2	22.7
55°	2968.3	1485.4	83.3	64.4	38.3	20.8	16.8	16.1	16.8	20.1	20.1
57.5°	3169.0	1564.7	75.2	57.0	30.3	16.8	13.5	13.5	14.7	18.1	18.8
60°	3435.3	1689.4	68.5	48.2	22.7	12.8	10.7	11.4	13.5	16.1	16.8
62.5°	3906.9	1901.4	59.6	40.2	16.8	10.2	8.8	9.4	12.0	15.5	16.1
65°	4497.4	2102.0	49.6	33.5	12.8	7.4	6.6	8.8	12.0	15.5	16.1
67.5°	4437.0	1828.3	38.8	26.8	9.4	6.1	5.4	8.1	11.4	15.5	16.1
70°	3598.3	1281.5	28.8	18.1	7.4	5.4	5.4	8.1	11.4	14.7	15.5
72.5°	2495.9	713.3	22.2	12.0	6.6	5.4	4.8	7.4	10.7	14.7	15.5
75°	1187.6	218.7	17.4	8.8	6.1	4.8	4.0	7.4	10.7	14.7	15.5
77.5°	228.1	55.7	14.2	7.4	5.4	4.8	4.0	6.6	10.7	14.2	14.7
80°	77.2	24.9	11.4	6.6	5.4	4.8	4.0	6.6	10.2	13.5	14.2
82.5°	42.3	14.2	10.2	6.1	5.4	4.0	3.4	6.1	9.4	13.5	14.2
85°	32.9	10.2	8.1	6.1	5.4	4.0	3.4	6.1	9.4	12.8	13.5
87.5°	16.8	7.4	6.6	6.1	5.4	4.0	3.4	5.4	8.8	12.0	13.5
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)