

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: P198709

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198709
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-SL3-800-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA 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: 8459.8 lumens
Efficiency: N/A
Efficacy: 99.5 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

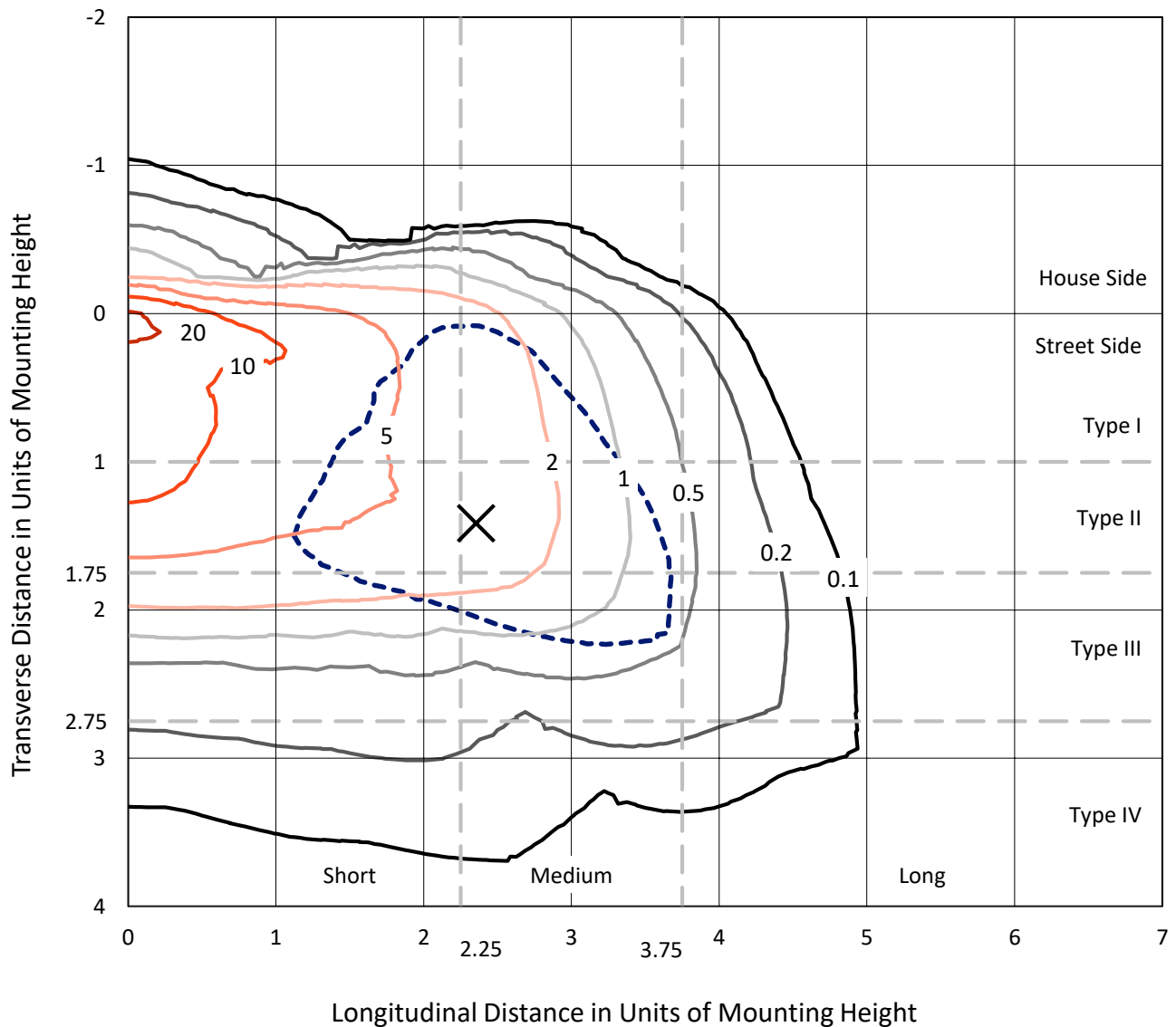
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

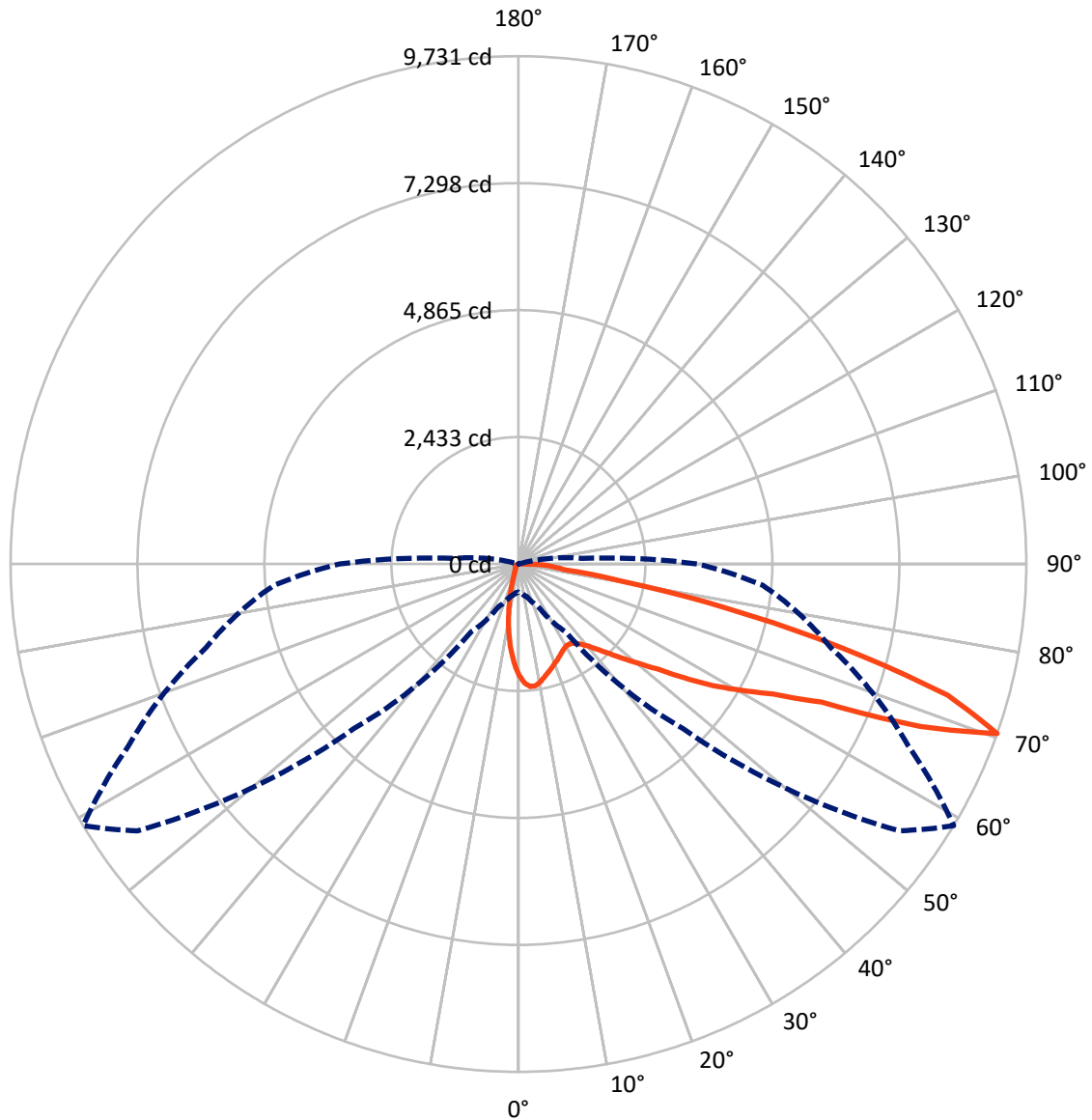
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.8 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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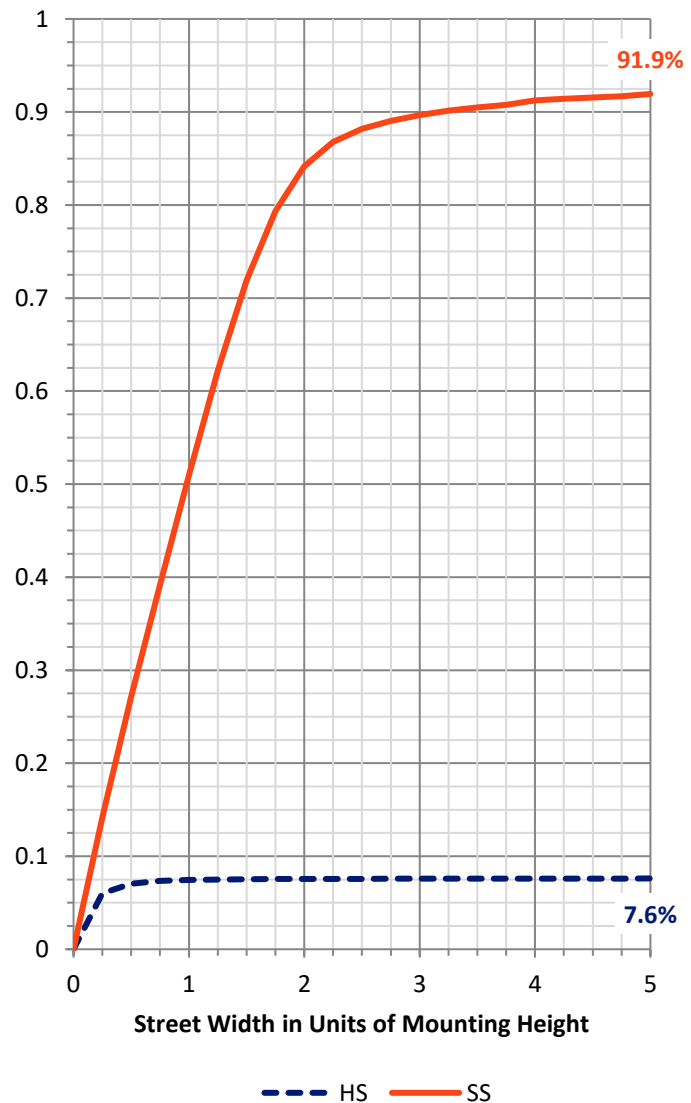
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	650.3	0.0	650.3
	% Fixture	7.7	0.0	7.7
Street Side	Lumens	7809.5	0.0	7809.5
	% Fixture	92.3	0.0	92.3
Total	Lumens	8459.8	0.0	8459.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	2.1
10°-20°	368.9	4.4
20°-30°	499.4	5.9
30°-40°	720.8	8.5
40°-50°	1197.0	14.1
50°-60°	1831.0	21.6
60°-70°	2277.3	26.9
70°-80°	1258.9	14.9
80°-90°	130.5	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°	8459.8	100.0
0°-180°	8459.8	100.0

Coefficient of Utilization



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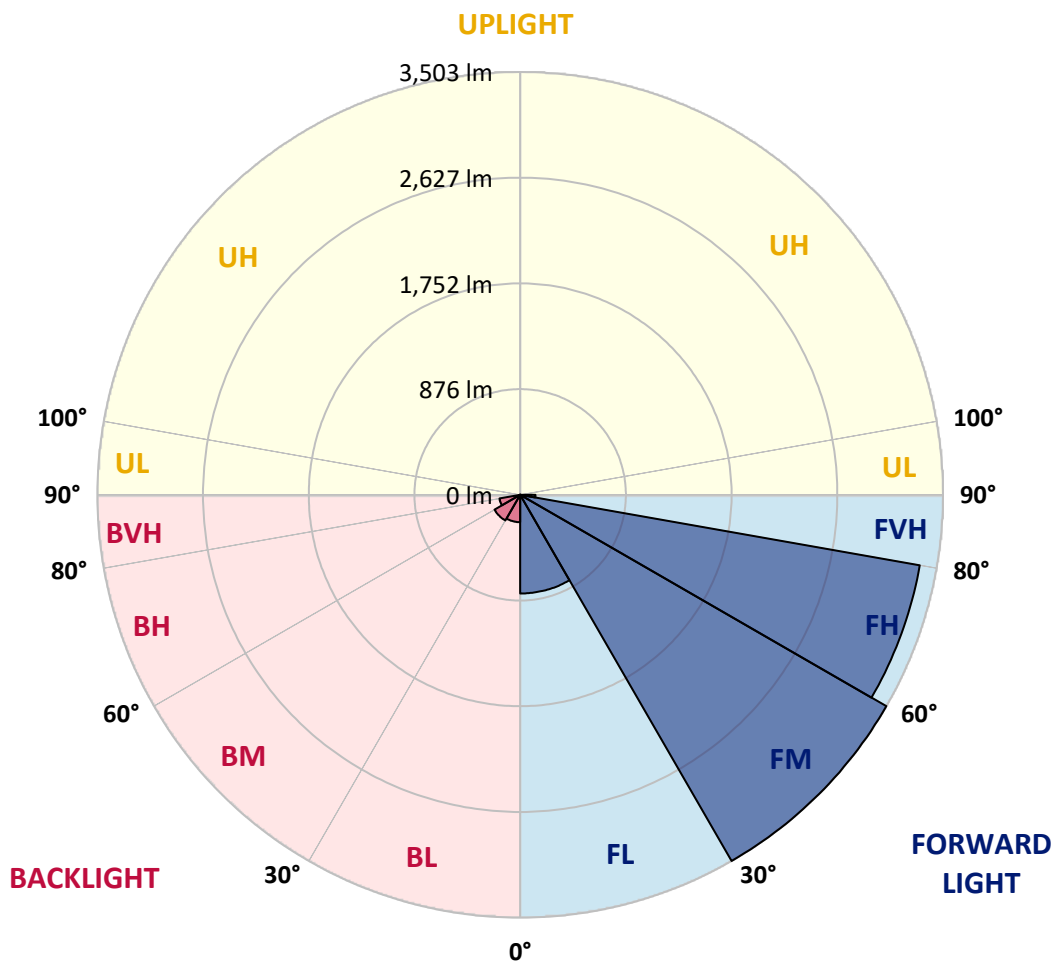
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	817.7	9.7			
FM	(30°-60°)	3503.3	41.4			
FH	(60°-80°)	3361.8	39.7			G2/5000
FVH	(80°-90°)	126.8	1.5			G2/225
BL	(0°-30°)	226.6	2.7	B1/500		
BM	(30°-60°)	245.5	2.9	B1/1000		
BH	(60°-80°)	174.5	2.1	B1/500		G1/500
BVH	(80°-90°)	3.8	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°	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2
2.5°	2418.1	2414.3	2398.3	2395.1	2377.2	2341.4	2300.0	2283.4	2249.6	2196.0	2136.6
5°	2458.3	2460.2	2461.4	2454.5	2451.9	2422.6	2376.6	2356.8	2311.5	2223.4	2115.0
7.5°	2307.7	2312.8	2328.7	2335.7	2366.4	2377.8	2368.3	2355.5	2319.7	2215.7	2063.2
10°	2148.7	2158.3	2175.5	2187.1	2224.7	2255.3	2294.3	2297.4	2289.8	2190.2	2005.2
12.5°	2012.1	2021.1	2040.3	2063.2	2101.6	2141.1	2199.1	2219.6	2245.1	2173.7	1963.7
15°	1894.7	1897.3	1915.8	1944.5	1995.0	2049.2	2118.1	2148.1	2197.9	2167.2	1931.7
17.5°	1792.0	1792.6	1804.8	1831.0	1892.3	1963.7	2044.1	2083.6	2146.9	2158.3	1903.7
20°	1724.4	1723.8	1724.4	1738.4	1792.6	1877.5	1975.2	2016.6	2097.7	2147.5	1875.0
22.5°	1701.4	1698.2	1683.5	1678.5	1712.8	1787.5	1904.3	1958.5	2053.7	2144.3	1853.9
25°	1729.5	1727.6	1696.3	1666.9	1670.1	1716.7	1832.2	1898.6	2019.2	2155.8	1848.8
27.5°	1820.1	1816.2	1768.4	1711.0	1674.6	1682.9	1778.6	1848.2	1991.8	2183.9	1855.8
30°	1938.8	1939.4	1888.4	1818.8	1733.3	1686.0	1749.9	1815.6	1973.3	2225.9	1871.2
32.5°	2070.9	2070.2	2033.8	1953.4	1844.4	1744.7	1762.6	1818.2	1975.8	2287.8	1900.5
35°	2207.4	2200.5	2188.3	2117.5	1989.8	1847.6	1820.8	1861.6	2002.6	2369.6	1950.3
37.5°	2365.1	2362.5	2374.7	2300.0	2169.8	1998.7	1922.8	1950.3	2070.2	2490.2	2030.7
40°	2615.9	2601.9	2607.6	2506.1	2372.7	2202.3	2065.7	2072.8	2178.1	2649.7	2157.7
42.5°	3093.9	3037.1	2930.5	2740.4	2596.1	2428.3	2252.7	2240.7	2330.6	2843.1	2324.9
45°	3665.0	3600.0	3331.3	2998.8	2819.5	2670.8	2483.8	2451.3	2518.3	3073.5	2540.6
47.5°	4141.8	4071.5	3715.5	3268.7	3046.7	2920.9	2739.7	2701.4	2742.9	3340.9	2799.7
50°	4304.5	4265.6	3952.9	3493.4	3275.8	3201.7	3060.7	2996.9	3007.1	3629.3	3102.2
52.5°	4229.9	4216.5	4007.1	3647.2	3487.6	3511.9	3412.4	3345.4	3333.9	3944.6	3436.6
55°	4072.3	4065.8	3963.7	3732.7	3674.6	3795.9	3905.6	3847.6	3739.1	4279.6	3712.9
57.5°	3846.9	3871.2	3944.6	3897.3	3904.4	4095.8	4363.9	4393.9	4231.7	4546.4	3917.8
60°	3245.1	3310.3	3646.5	4074.1	4401.6	4594.9	4854.6	4910.8	4649.1	4728.9	4154.5
62.5°	2398.9	2492.1	2971.4	3757.0	4675.3	5543.9	5507.5	5482.6	5047.3	4973.4	4585.3
65°	1409.1	1518.3	1923.5	2935.7	4262.4	6154.0	6726.4	6381.8	5654.3	5481.4	5271.4
67.5°	701.9	702.7	885.8	1549.5	3150.1	5728.3	8505.6	8306.6	6944.7	6229.9	5541.9
70°	539.9	554.5	655.4	900.5	1592.9	4461.5	8913.5	9730.9	8241.5	6196.7	4702.1
72.5°	457.6	467.2	583.3	783.7	1190.8	2449.4	7716.2	8601.4	7864.3	5235.7	3466.0
75°	329.3	337.0	516.3	711.0	1096.4	1215.1	5293.1	6379.2	5900.6	3682.9	1907.5
77.5°	81.7	81.0	179.9	576.9	980.9	1012.1	3037.1	4090.8	3385.6	1508.0	490.1
80°	36.4	35.1	40.8	121.2	912.6	955.3	1335.7	2065.7	1298.7	244.4	150.0
82.5°	25.6	24.2	25.6	44.7	305.0	886.4	807.3	895.4	475.5	83.6	63.8
85°	8.3	7.7	14.0	37.6	85.5	511.2	787.5	668.8	353.5	35.7	42.8
87.5°	1.2	1.2	5.1	20.5	24.9	170.4	462.1	463.3	158.9	21.1	19.1
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°	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2	2139.2
2.5°	2106.7	2069.0	2016.0	1963.0	1915.2	1866.1	1826.5	1808.0	1799.7	1788.2	1763.3
5°	2058.2	1989.8	1873.7	1759.5	1652.9	1550.8	1463.3	1413.6	1359.9	1357.5	1331.3
7.5°	1980.2	1883.3	1700.1	1522.7	1359.9	1204.2	1070.2	983.5	924.1	887.1	861.5
10°	1893.5	1769.0	1526.5	1276.9	1055.6	847.5	675.1	562.8	494.6	460.1	440.4
12.5°	1824.5	1668.2	1355.5	1041.5	763.9	525.2	365.0	283.4	246.9	232.9	226.6
15°	1765.2	1575.7	1195.3	830.9	509.9	301.9	211.2	184.4	178.7	178.7	178.1
17.5°	1705.3	1486.3	1039.6	624.1	321.0	197.8	166.5	162.8	163.4	165.3	165.3
20°	1648.4	1401.4	889.7	444.8	210.6	158.3	151.3	150.0	151.9	154.5	153.9
22.5°	1602.5	1326.8	749.2	305.7	162.1	143.6	139.1	137.2	138.5	140.3	139.7
25°	1569.9	1262.9	620.3	213.2	141.1	130.8	125.7	123.2	121.9	123.2	122.5
27.5°	1550.2	1209.3	499.1	160.2	126.3	118.0	111.7	106.6	103.4	103.4	102.1
30°	1537.4	1158.9	391.2	132.8	114.3	105.3	96.4	89.3	84.2	83.0	82.3
32.5°	1536.8	1115.5	292.3	117.4	102.7	92.6	81.7	72.7	67.0	65.8	65.1
35°	1552.7	1080.4	215.0	106.0	92.6	80.4	68.3	58.7	53.6	53.6	53.0
37.5°	1594.2	1060.0	162.8	97.0	84.2	70.2	57.4	48.5	44.0	45.3	45.3
40°	1671.4	1056.2	132.8	90.0	77.2	61.3	46.5	39.6	37.6	39.6	39.6
42.5°	1789.4	1076.7	118.0	84.9	70.8	52.4	39.0	33.9	33.1	35.1	35.1
45°	1943.3	1116.9	109.8	80.4	63.8	43.4	32.5	29.4	28.7	31.3	31.3
47.5°	2129.6	1171.1	102.1	75.3	56.8	35.7	27.4	24.9	24.9	27.4	28.0
50°	2350.4	1244.4	94.4	70.2	51.0	30.0	23.0	21.1	21.7	24.2	24.9
52.5°	2604.4	1334.4	87.5	65.8	44.7	24.2	19.1	17.9	18.5	21.1	21.7
55°	2823.3	1412.9	79.2	61.3	36.4	19.7	16.0	15.3	16.0	19.1	19.1
57.5°	3014.1	1488.2	71.5	54.2	28.7	16.0	12.8	12.8	14.0	17.2	17.9
60°	3267.5	1607.0	65.1	45.9	21.7	12.2	10.2	10.8	12.8	15.3	16.0
62.5°	3716.1	1808.6	56.8	38.3	16.0	9.6	8.3	8.9	11.5	14.6	15.3
65°	4277.7	1999.5	47.3	31.9	12.2	7.1	6.3	8.3	11.5	14.6	15.3
67.5°	4220.3	1739.0	37.0	25.6	8.9	5.7	5.1	7.7	10.8	14.6	15.3
70°	3422.6	1218.9	27.4	17.2	7.1	5.1	5.1	7.7	10.8	14.0	14.6
72.5°	2374.1	678.4	21.1	11.5	6.3	5.1	4.5	7.1	10.2	14.0	14.6
75°	1129.5	208.1	16.6	8.3	5.7	4.5	3.8	7.1	10.2	14.0	14.6
77.5°	217.0	53.0	13.4	7.1	5.1	4.5	3.8	6.3	10.2	13.4	14.0
80°	73.3	23.6	10.8	6.3	5.1	4.5	3.8	6.3	9.6	12.8	13.4
82.5°	40.2	13.4	9.6	5.7	5.1	3.8	3.2	5.7	8.9	12.8	13.4
85°	31.3	9.6	7.7	5.7	5.1	3.8	3.2	5.7	8.9	12.2	12.8
87.5°	16.0	7.1	6.3	5.7	5.1	3.8	3.2	5.1	8.3	11.5	12.8
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)