

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: P271295

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
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-AFL-7027-600-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5793.6 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 66
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

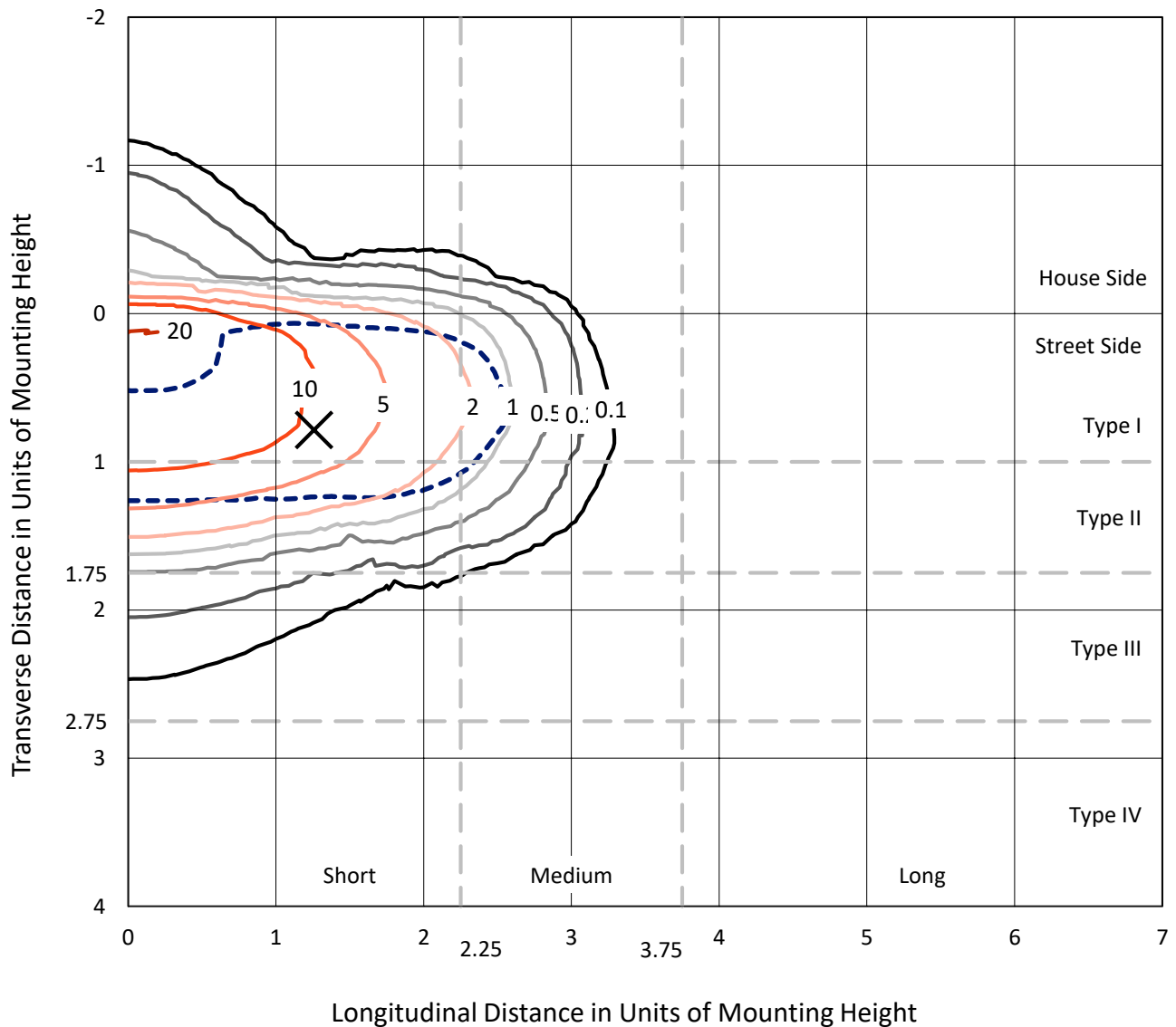


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

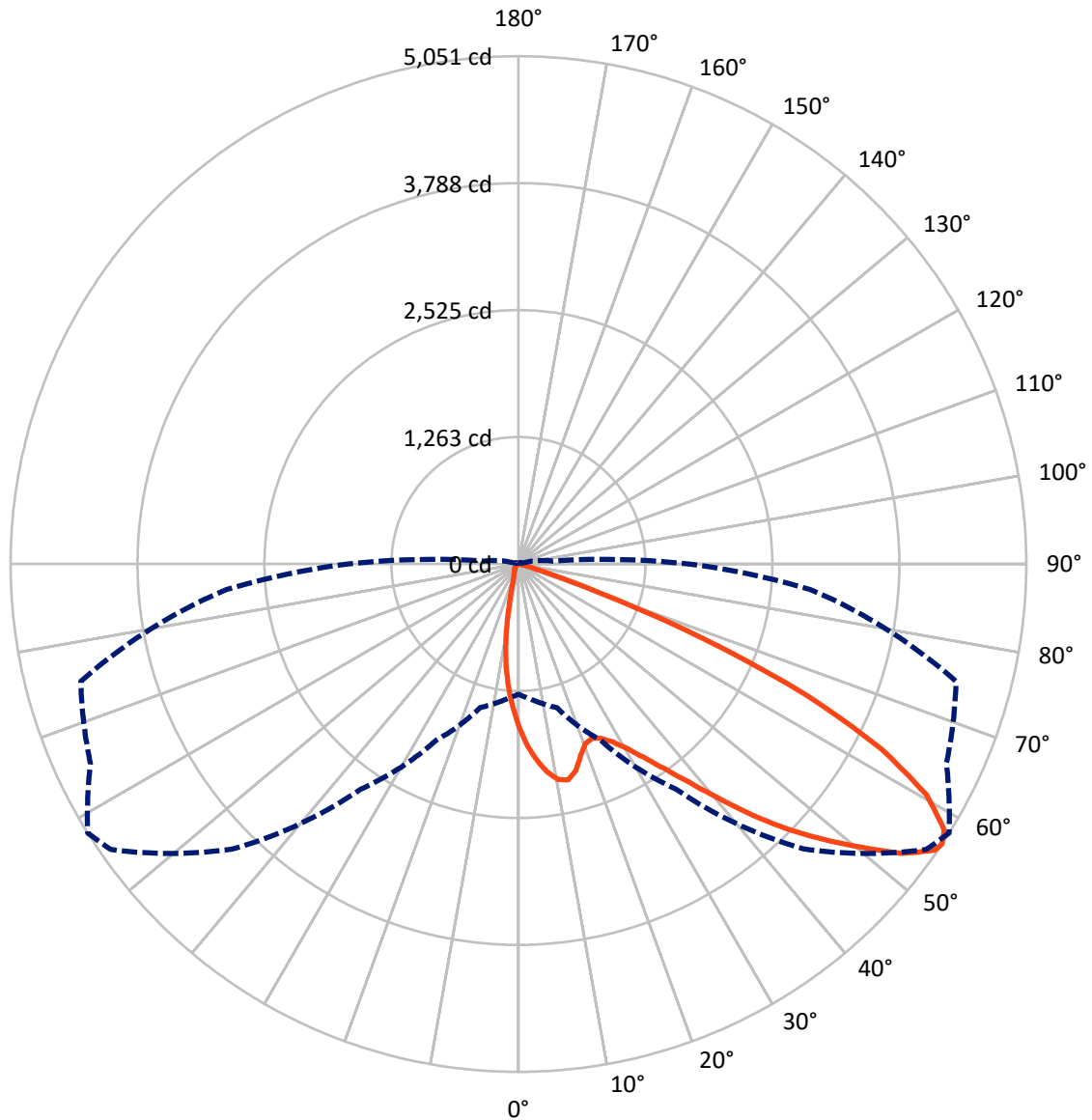


Based on 10 foot mounting height. Maximum calculated value = 20.4 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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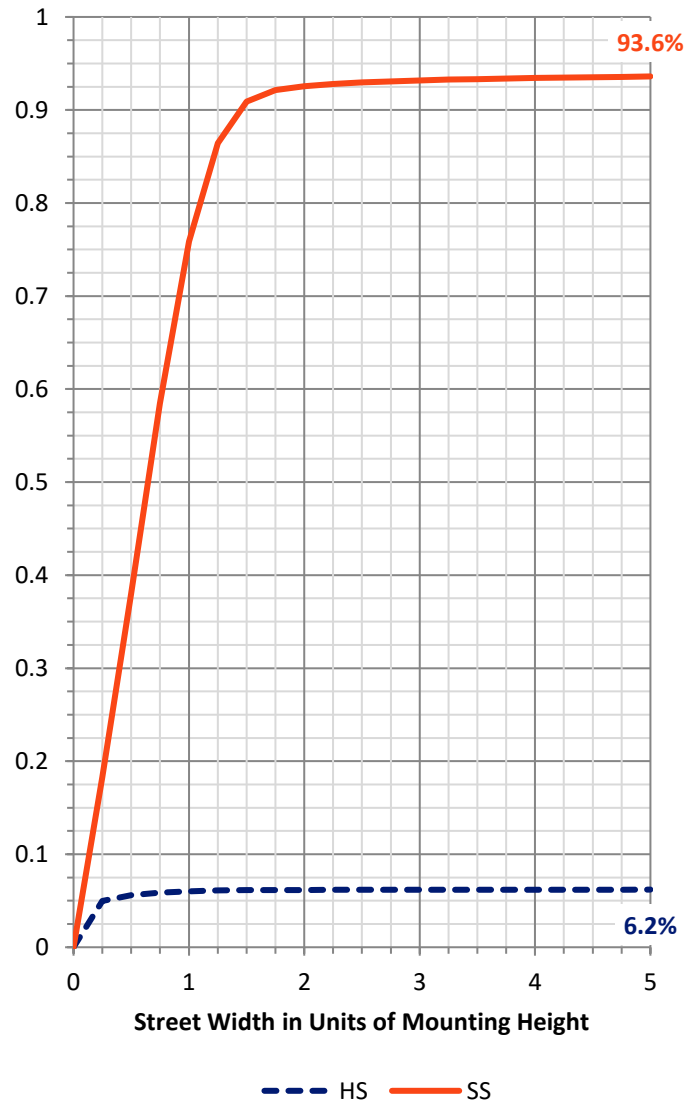
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	361.6	0.0	361.6
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	5432.0	0.0	5432.0
	% Fixture	93.8	0.0	93.8
Total	Lumens	5793.6	0.0	5793.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	2.4
10°-20°	325.6	5.6
20°-30°	547.9	9.5
30°-40°	938.2	16.2
40°-50°	1415.7	24.4
50°-60°	1471.6	25.4
60°-70°	826.1	14.3
70°-80°	113.2	2.0
80°-90°	15.3	0.3
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°	5793.6	100.0
0°-180°	5793.6	100.0



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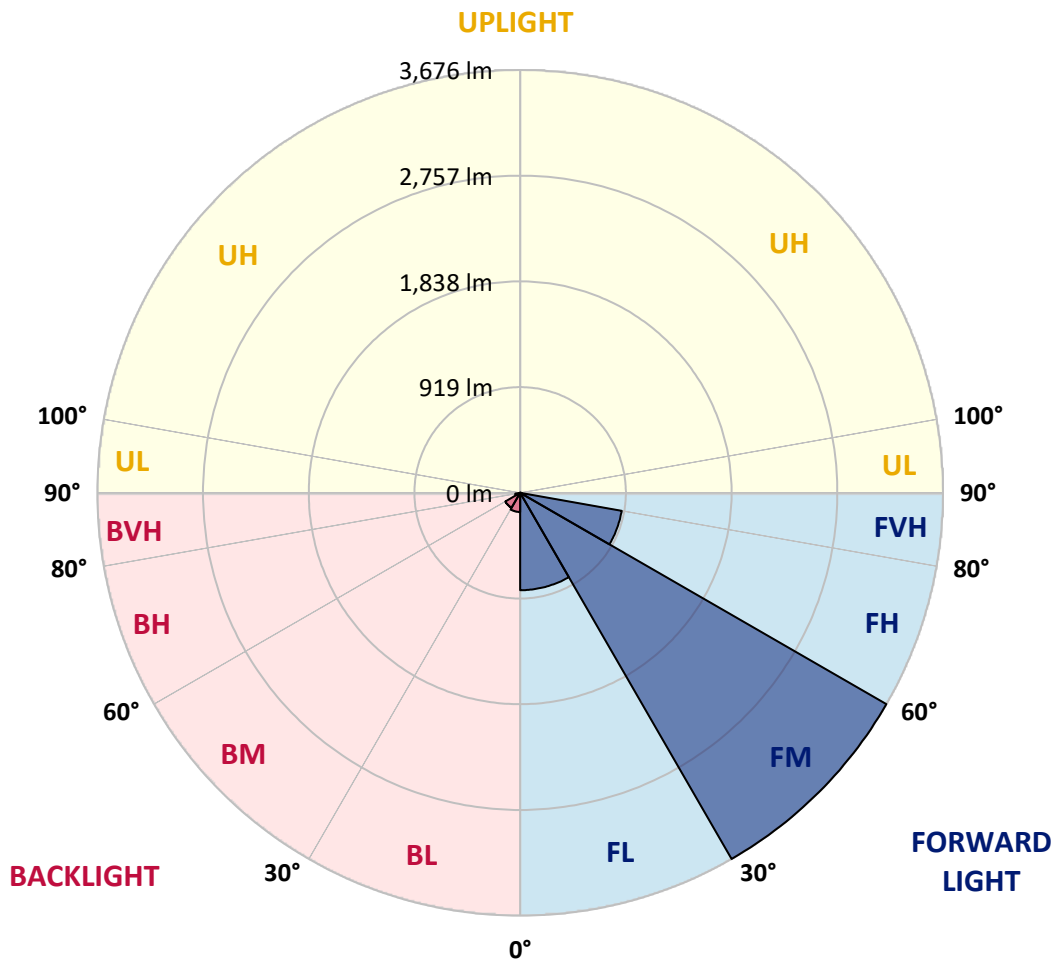
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	846.6	14.6			
FM (30°-60°)	3675.8	63.4			
FH (60°-80°)	896.5	15.5			G1/1800
FVH (80°-90°)	13.2	0.2			G1/100
BL (0°-30°)	166.8	2.9	B1/500		
BM (30°-60°)	149.8	2.6	B0/220		
BH (60°-80°)	42.9	0.7	B0/110		G0/110
BVH (80°-90°)	2.1	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3
2.5°	1973.7	1961.7	1949.3	1926.3	1905.1	1872.4	1827.3	1816.4	1780.9	1722.6	1668.2
5°	2143.8	2141.6	2133.3	2114.7	2091.7	2051.9	2001.1	1967.0	1912.2	1820.2	1715.6
7.5°	2043.0	2061.6	2092.2	2135.5	2164.6	2160.7	2121.7	2092.2	2037.7	1912.2	1761.9
10°	1722.1	1725.6	1767.7	1858.8	2002.9	2137.2	2188.0	2180.0	2130.2	1992.7	1802.5
12.5°	1609.0	1611.2	1620.9	1650.0	1743.8	1931.3	2161.5	2203.1	2199.1	2069.5	1845.8
15°	1617.8	1619.1	1621.8	1631.1	1657.6	1751.8	2027.1	2132.8	2243.2	2142.5	1888.3
17.5°	1687.6	1686.7	1678.4	1669.5	1677.9	1708.8	1890.2	2001.6	2234.1	2203.9	1923.4
20°	1823.7	1828.2	1799.9	1760.6	1740.2	1741.6	1822.5	1906.1	2181.9	2251.7	1949.3
22.5°	2015.2	2018.3	1971.9	1903.8	1844.1	1814.0	1836.7	1880.8	2121.7	2295.9	1970.5
25°	2243.7	2243.7	2178.7	2081.9	1989.6	1923.7	1904.2	1921.0	2098.8	2345.8	1991.8
27.5°	2490.5	2499.3	2414.4	2287.5	2165.5	2069.2	2008.2	2005.0	2116.4	2408.6	2015.6
30°	2758.8	2766.7	2665.9	2510.8	2366.1	2242.9	2149.1	2128.9	2184.0	2493.1	2050.7
32.5°	3025.8	3032.3	2920.8	2762.6	2594.2	2449.3	2325.9	2293.7	2305.6	2616.4	2101.9
35°	3365.2	3366.5	3225.5	3037.2	2857.2	2687.1	2531.1	2499.3	2486.0	2772.0	2175.7
37.5°	3635.3	3624.7	3535.3	3357.1	3150.7	2973.1	2789.6	2748.1	2716.2	2990.7	2290.1
40°	3699.0	3699.0	3685.7	3632.1	3468.1	3297.0	3119.5	3057.6	2987.3	3248.5	2444.0
42.5°	3533.2	3543.8	3631.3	3747.5	3748.8	3639.3	3465.5	3413.3	3289.6	3541.9	2611.9
45°	3162.3	3165.4	3375.3	3689.2	3902.2	3964.9	3836.8	3764.7	3593.2	3847.0	2765.8
47.5°	3028.7	3038.4	3127.8	3511.5	3913.7	4229.0	4193.1	4094.0	3874.4	4125.5	2909.4
50°	2823.7	2835.6	2944.9	3249.8	3810.3	4398.2	4533.8	4427.7	4130.2	4357.5	2980.5
52.5°	2333.0	2351.7	2505.8	2903.7	3551.7	4405.3	4845.9	4782.2	4392.4	4481.7	2972.2
55°	1605.5	1619.1	1799.0	2266.8	3030.2	4189.1	4980.4	5024.1	4626.4	4509.6	2931.4
56°	1295.1	1346.4	1478.2	1931.3	2733.1	4005.3	4949.4	5050.6	4695.7	4505.2	2913.8
57.5°	856.3	866.0	1009.5	1399.5	2194.6	3606.1	4809.7	4994.0	4784.9	4482.6	2901.0
60°	402.7	407.1	458.9	645.8	1187.6	2627.8	4355.7	4661.7	4817.7	4435.3	2900.5
62.5°	262.6	263.5	269.6	308.1	485.9	1431.3	3610.9	4051.1	4546.7	4430.0	2892.3
65°	216.1	218.4	210.8	215.8	254.2	539.7	2547.0	3158.4	3910.6	4305.3	2797.6
67.5°	190.5	191.0	180.7	175.0	186.0	237.0	1283.1	1992.3	2924.9	3658.3	2304.3
70°	173.7	173.3	161.8	148.5	148.9	157.4	418.2	827.5	1618.2	2172.1	1323.1
72.5°	154.2	155.1	148.5	130.0	123.7	111.4	157.4	223.1	550.8	697.5	348.7
75°	135.3	133.5	126.9	115.0	103.5	74.6	79.1	95.0	143.6	142.3	75.2
77.5°	102.5	100.8	103.8	98.2	80.8	52.1	43.3	49.4	64.9	60.5	30.5
80°	78.2	77.3	70.7	84.0	73.8	39.3	29.6	30.5	35.4	32.2	15.0
82.5°	56.6	56.1	53.4	51.7	46.8	28.7	22.5	23.9	26.5	22.5	11.0
85°	21.6	21.6	42.0	35.4	32.2	19.5	15.9	17.2	20.3	16.3	7.5
87.5°	3.6	3.6	28.2	23.4	14.6	9.7	10.2	11.0	11.9	9.7	5.7
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°	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3	1640.3
2.5°	1636.0	1606.3	1541.3	1478.6	1423.8	1363.6	1333.2	1297.8	1284.5	1257.9	1260.7
5°	1652.7	1590.9	1460.5	1323.1	1197.0	1068.9	977.7	891.9	844.2	796.9	796.9
7.5°	1669.9	1575.4	1373.8	1154.1	942.0	722.2	566.7	442.1	372.6	326.3	324.8
10°	1681.9	1555.4	1275.2	958.3	645.3	372.2	224.5	176.7	159.5	152.1	151.6
12.5°	1697.3	1535.7	1162.9	727.5	358.5	176.7	140.1	132.6	129.5	127.7	127.7
15°	1710.6	1507.4	1026.9	489.3	188.4	132.6	120.7	117.9	117.6	117.0	117.6
17.5°	1713.7	1467.1	863.7	286.4	136.6	115.8	110.5	108.2	108.2	107.8	107.8
20°	1706.7	1414.0	683.4	176.7	117.9	106.4	100.8	98.2	97.6	97.6	97.6
22.5°	1692.0	1346.4	505.2	133.9	107.3	98.2	90.5	87.9	87.9	88.5	88.8
25°	1673.9	1266.4	346.9	115.3	99.4	89.3	81.7	79.1	79.9	80.8	81.3
27.5°	1650.9	1170.9	227.2	99.9	88.8	80.5	73.8	72.0	73.8	75.5	76.4
30°	1628.0	1066.2	153.8	86.6	77.0	70.7	66.7	66.4	69.0	72.9	73.4
32.5°	1612.9	958.8	116.2	77.9	67.6	62.3	60.5	61.4	65.4	69.9	70.7
35°	1611.6	854.0	99.1	70.7	61.4	56.6	55.7	58.3	62.8	66.4	67.3
37.5°	1632.4	755.8	89.7	65.4	56.6	51.7	50.3	55.2	59.2	62.8	63.7
40°	1674.4	667.9	83.5	60.5	52.6	46.8	46.0	49.9	53.9	57.9	59.2
42.5°	1727.0	585.6	76.4	55.7	48.1	41.5	40.7	43.7	47.7	53.4	54.3
45°	1772.5	509.2	69.0	50.3	43.3	35.8	35.4	38.8	42.0	47.3	48.1
47.5°	1811.1	445.6	62.0	44.6	37.1	31.8	31.4	33.1	34.9	39.7	40.7
50°	1790.6	391.7	54.7	36.7	30.1	27.4	26.9	26.9	29.1	34.0	34.9
52.5°	1740.7	358.1	48.1	30.5	24.8	23.4	22.1	22.5	24.8	26.9	27.4
55°	1700.5	342.2	42.4	26.9	20.8	19.5	18.1	17.6	18.1	17.2	16.3
56°	1690.8	340.4	41.1	26.1	19.9	18.1	16.3	15.5	15.0	13.2	12.8
57.5°	1686.4	340.4	38.8	24.3	18.5	16.3	14.2	12.3	10.6	9.3	9.3
60°	1682.9	342.6	36.2	21.2	15.9	13.2	10.2	7.5	6.2	6.2	6.2
62.5°	1675.2	341.6	33.1	17.6	13.7	10.2	6.2	4.9	4.4	4.9	5.3
65°	1590.9	317.5	29.1	14.2	10.6	7.0	3.6	3.6	4.0	4.9	5.3
67.5°	1281.9	240.4	23.9	11.0	7.5	5.3	3.1	3.1	4.0	4.9	5.3
70°	704.1	126.9	20.3	7.9	5.7	4.4	3.1	2.6	4.0	4.9	5.3
72.5°	171.9	53.0	18.5	6.2	5.3	4.0	2.6	2.6	4.0	4.9	5.3
75°	42.4	39.7	15.0	4.9	4.4	3.6	2.6	2.6	4.0	4.9	5.3
77.5°	19.9	52.6	10.2	4.4	4.0	3.1	2.6	2.6	4.0	4.9	4.9
80°	11.9	39.7	6.2	4.0	3.6	3.1	2.6	2.6	4.0	4.9	5.3
82.5°	7.0	11.5	4.4	4.0	3.6	2.6	2.6	2.6	4.0	4.9	5.3
85°	6.2	5.7	4.4	4.0	3.6	3.1	2.6	2.6	4.4	5.3	5.3
87.5°	4.9	4.4	4.0	3.6	3.6	3.1	2.6	2.6	4.0	4.9	5.3
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)