

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: P198895

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198895
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)
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-SL4-7050
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11504 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

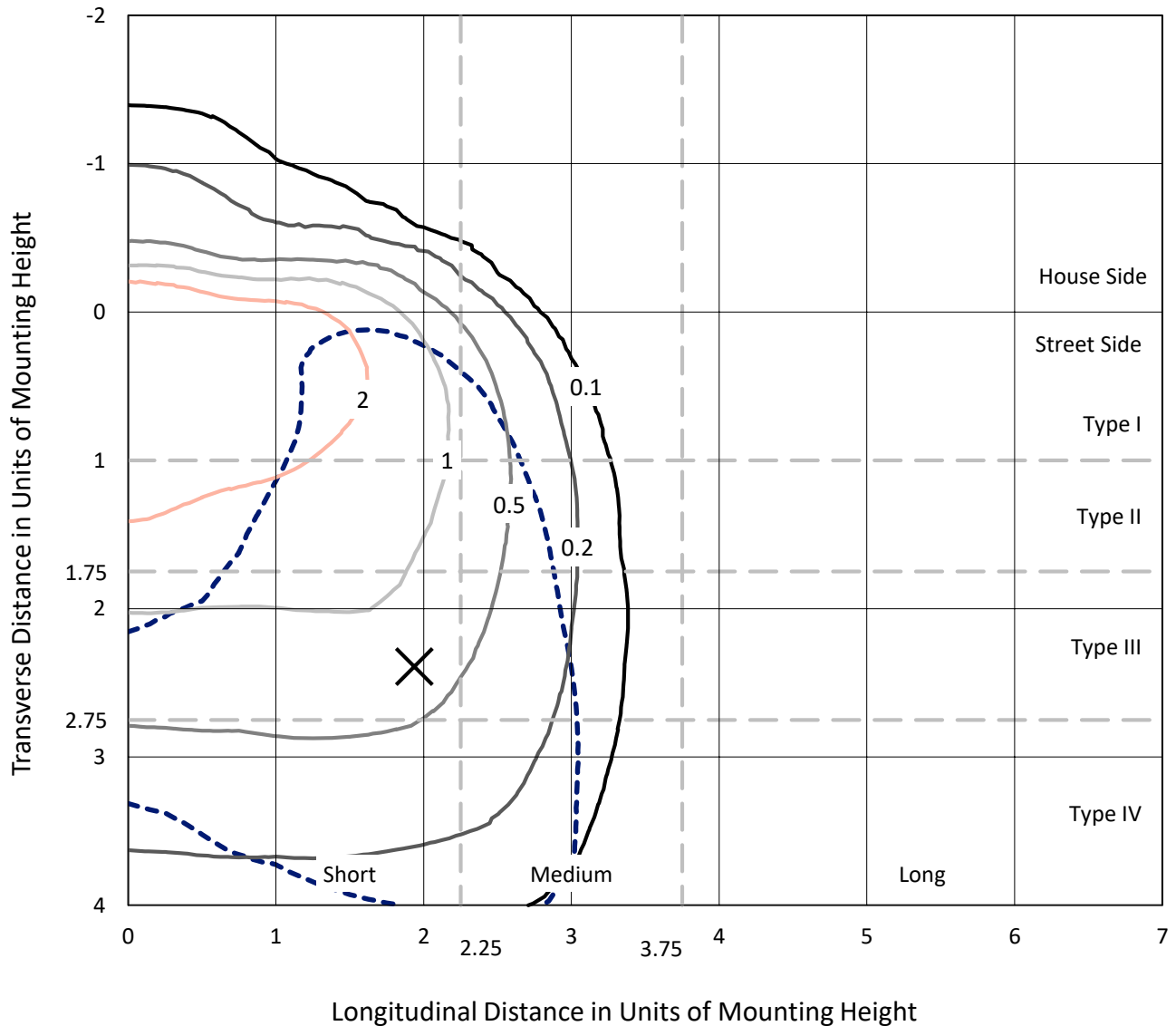
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

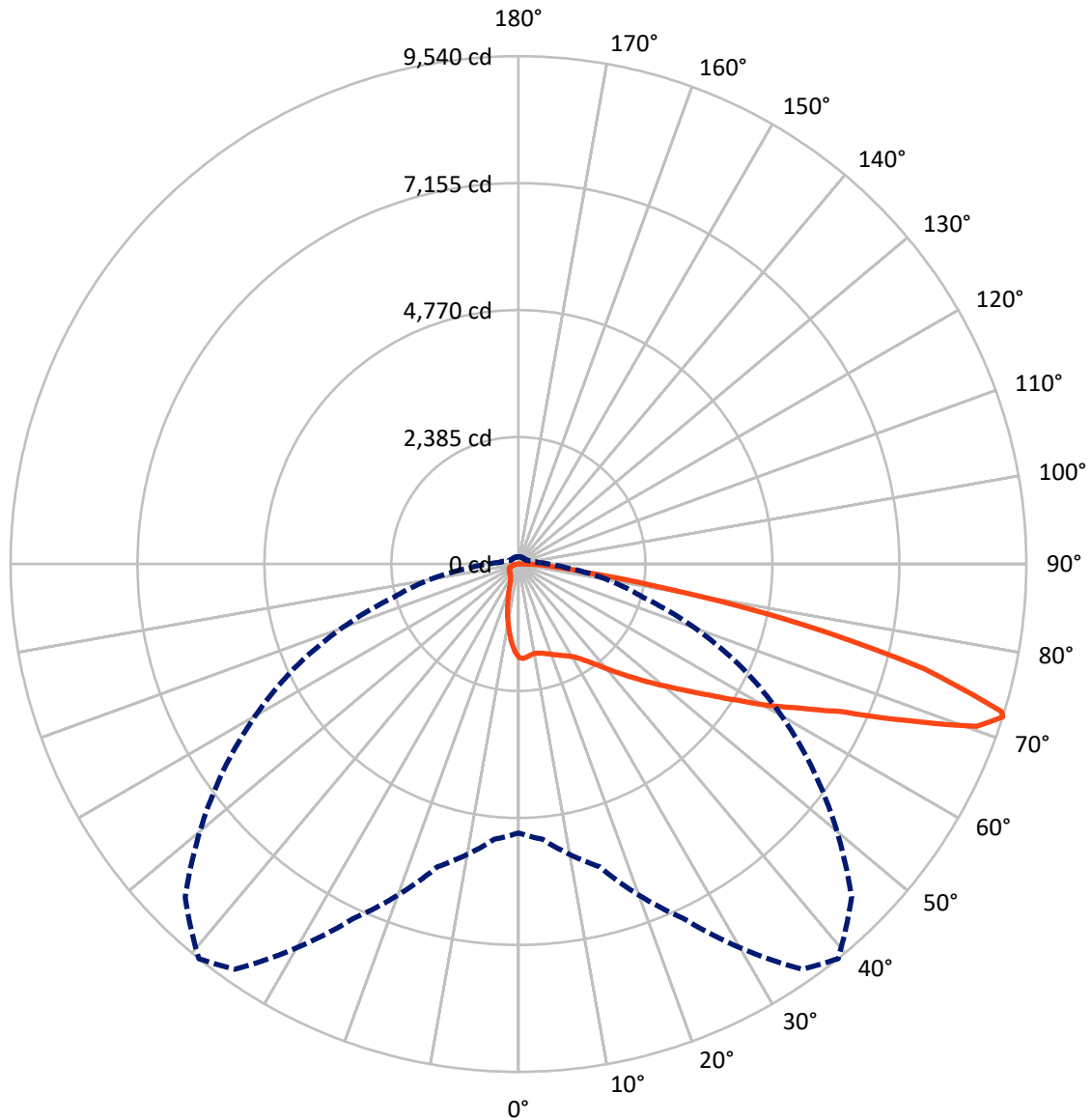
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical



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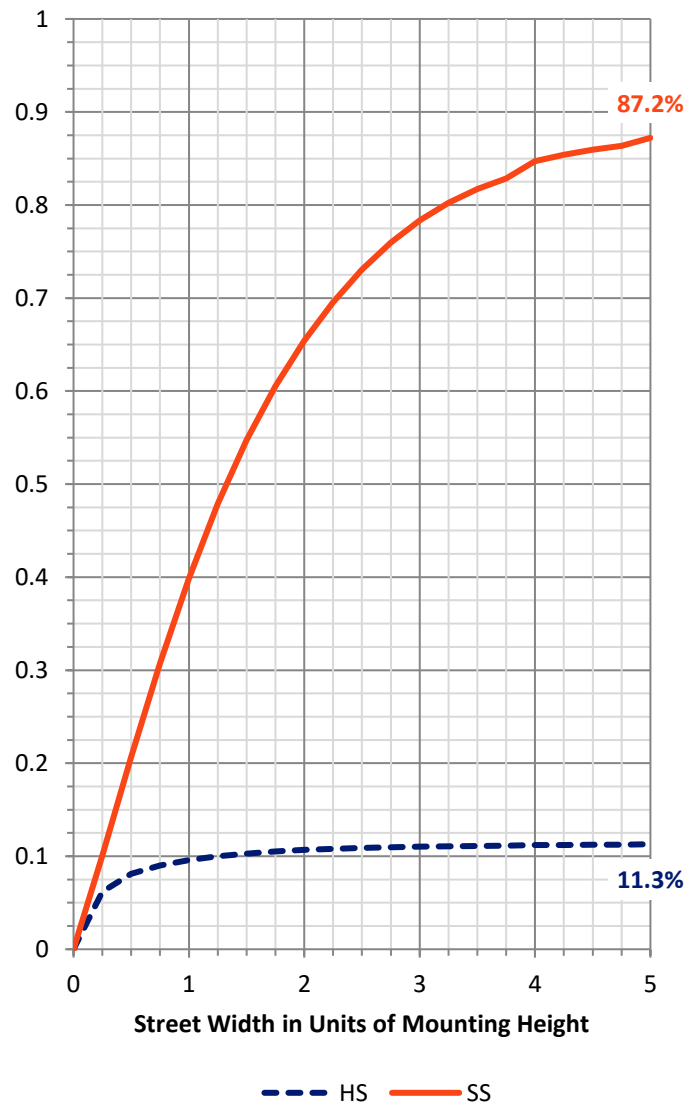
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1319.1	0.0	1319.1
	% Fixture	11.5	0.0	11.5
Street Side	Lumens	10184.9	0.0	10184.9
	% Fixture	88.5	0.0	88.5
Total	Lumens	11504.0	0.0	11504.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	1.3
10°-20°	379.4	3.3
20°-30°	591.2	5.1
30°-40°	910.3	7.9
40°-50°	1484.0	12.9
50°-60°	2305.9	20.0
60°-70°	3086.4	26.8
70°-80°	2219.6	19.3
80°-90°	376.3	3.3
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°	11504.0	100.0
0°-180°	11504.0	100.0



REPORT NUMBER: P198895

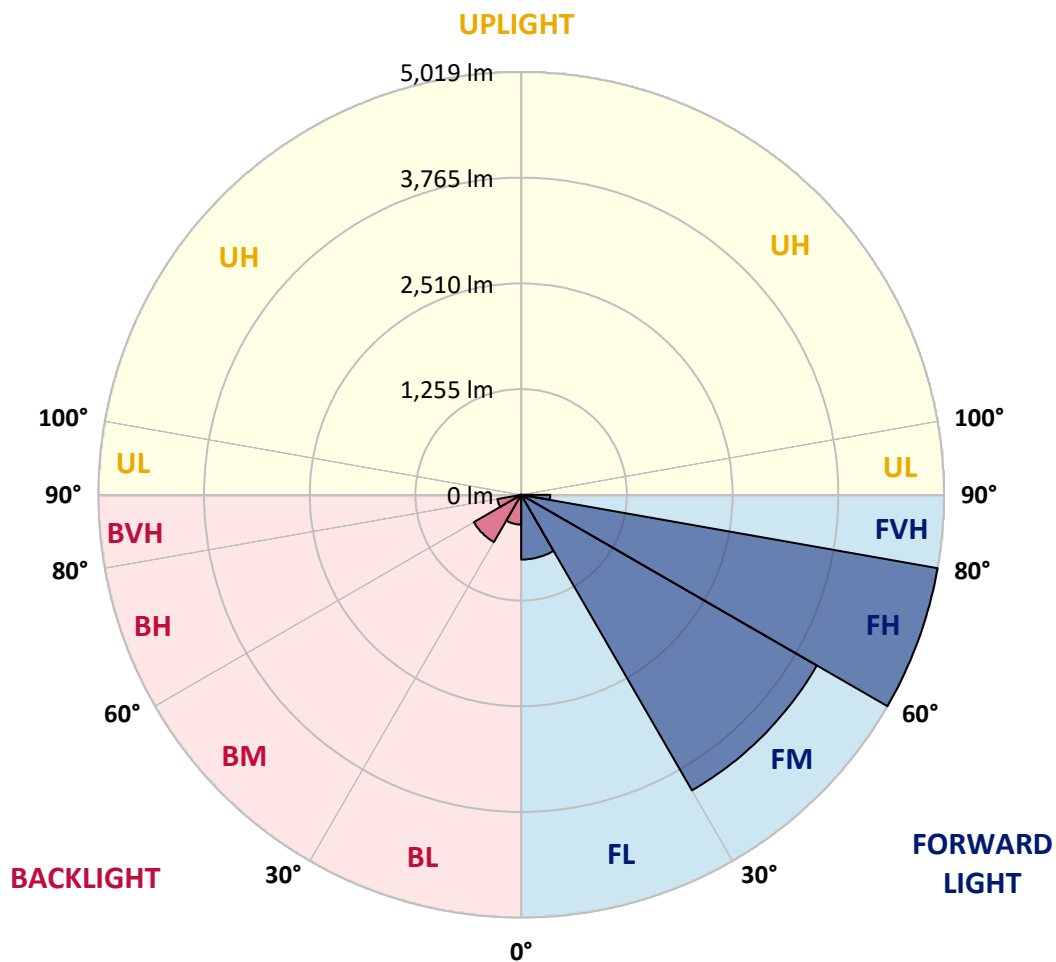
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	768.4	6.7			
FM	(30°-60°)	4051.9	35.2			
FH	(60°-80°)	5019.4	43.6			G3/7500
FVH	(80°-90°)	345.2	3.0			G3/500
BL	(0°-30°)	353.1	3.1	B1/500		
BM	(30°-60°)	648.3	5.6	B1/1000		
BH	(60°-80°)	286.6	2.5	B1/500		G1/500
BVH	(80°-90°)	31.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





REPORT NUMBER: P198895

CATALOG NUMBER: XNV2-AF-02-LED-U-SL4-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9
2.5°	1794.7	1795.5	1793.2	1786.2	1780.0	1776.9	1771.5	1762.3	1749.9	1741.4	1734.5
5°	1777.7	1780.0	1778.5	1766.9	1756.1	1749.9	1741.4	1728.3	1712.1	1705.1	1688.9
7.5°	1764.6	1766.1	1761.5	1748.4	1727.5	1719.8	1704.4	1687.4	1672.7	1662.7	1643.3
10°	1755.3	1756.9	1753.0	1739.9	1716.7	1707.4	1688.9	1670.4	1651.1	1638.7	1617.1
12.5°	1742.2	1745.3	1745.3	1739.1	1723.7	1717.5	1698.9	1678.9	1661.1	1648.0	1621.0
15°	1739.9	1743.7	1750.7	1749.9	1745.3	1740.7	1726.0	1705.9	1690.5	1675.0	1641.8
17.5°	1759.2	1767.7	1781.6	1786.2	1783.1	1773.1	1756.1	1737.6	1720.6	1705.9	1665.0
20°	1807.8	1812.5	1833.3	1842.6	1827.1	1812.5	1790.1	1766.1	1750.7	1739.1	1686.6
22.5°	1881.2	1887.4	1904.4	1905.1	1872.7	1854.9	1826.4	1797.0	1782.4	1777.7	1715.9
25°	1998.6	1997.0	2001.7	1982.4	1923.7	1902.8	1868.1	1834.1	1824.1	1833.3	1759.2
27.5°	2139.1	2135.3	2120.6	2070.4	1981.6	1954.6	1912.9	1882.7	1882.7	1904.4	1817.9
30°	2301.3	2297.4	2249.6	2165.4	2050.3	2019.4	1975.4	1943.8	1960.0	2001.7	1897.4
32.5°	2472.7	2458.8	2391.7	2278.9	2148.4	2114.4	2071.9	2039.5	2070.4	2141.4	2011.7
35°	2634.1	2626.4	2543.8	2410.2	2275.0	2246.5	2217.1	2177.0	2226.4	2336.8	2173.1
37.5°	2800.9	2794.8	2693.6	2551.5	2429.5	2410.2	2385.5	2357.7	2437.2	2582.4	2391.7
40°	2987.1	2974.7	2847.3	2705.2	2609.4	2600.2	2587.0	2579.3	2707.5	2923.7	2668.1
42.5°	3197.9	3173.9	3009.5	2874.3	2805.6	2813.3	2806.4	2837.2	3033.4	3317.6	2997.1
45°	3438.8	3390.9	3170.9	3054.2	3022.6	3053.5	3068.1	3146.9	3418.7	3772.4	3364.7
47.5°	3664.3	3602.5	3347.7	3249.6	3267.4	3320.7	3362.4	3501.4	3841.2	4221.9	3740.0
50°	3872.1	3802.6	3536.9	3452.0	3538.4	3614.1	3700.6	3896.8	4290.6	4684.5	4084.4
52.5°	4025.7	3975.5	3726.1	3672.8	3849.7	3950.1	4088.3	4336.2	4744.7	5125.4	4391.8
55°	4144.7	4117.6	3910.7	3926.1	4201.8	4345.4	4513.0	4798.0	5225.0	5520.8	4638.9
57.5°	4282.1	4262.0	4121.5	4231.9	4638.9	4819.6	5017.3	5333.9	5682.2	5869.1	4832.7
60°	4427.3	4427.3	4356.3	4600.3	5185.7	5392.6	5589.5	5835.9	6137.8	6182.6	4911.5
62.5°	4537.0	4565.5	4591.0	4992.6	5704.6	5961.8	6178.0	6414.3	6609.7	6337.1	4726.2
65°	4696.0	4757.1	4900.7	5445.9	6347.1	6683.8	6975.7	7174.2	6991.9	6214.3	4121.5
67.5°	4969.4	5059.8	5365.6	6120.8	7331.0	7835.2	8118.7	7775.8	6917.0	5441.3	3157.0
70°	5215.8	5343.2	5866.0	6977.3	8609.8	9133.4	9002.9	7636.0	6024.3	3988.7	1942.2
72°	5052.1	5191.1	5889.2	7350.3	9293.2	9540.4	8852.3	6767.2	4655.1	2434.1	957.6
72.5°	4944.7	5089.1	5814.3	7341.0	9311.8	9488.6	8643.0	6422.0	4225.7	2129.9	774.6
75°	4130.8	4254.3	4999.5	6506.2	8205.9	7881.6	6744.8	4156.2	1942.2	688.1	398.5
77.5°	2697.5	2791.7	3447.3	4507.6	5747.9	5435.9	4105.3	1946.1	728.2	417.8	299.6
80°	1355.3	1422.5	1844.9	2370.0	3102.1	2854.2	1895.1	941.4	487.3	301.9	235.5
82.5°	942.9	1004.7	1270.4	1210.1	1296.6	1254.9	891.2	785.4	364.5	190.7	123.6
85°	790.8	854.9	1051.0	862.6	705.8	643.3	638.7	742.1	240.9	94.2	104.3
87.5°	689.6	786.9	867.2	630.2	484.2	427.1	470.3	680.4	76.5	51.7	31.7
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°	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9	1756.9
2.5°	1722.9	1720.6	1709.0	1691.2	1678.1	1669.6	1653.4	1652.6	1654.2	1640.3	1645.7
5°	1674.2	1665.0	1634.9	1593.9	1560.7	1529.1	1494.3	1482.7	1472.7	1451.8	1454.1
7.5°	1623.3	1607.1	1554.5	1487.4	1423.3	1364.6	1306.6	1278.1	1256.4	1229.4	1229.4
10°	1593.2	1567.7	1487.4	1389.3	1287.3	1201.6	1115.1	1063.4	1025.5	990.8	988.5
12.5°	1591.6	1553.0	1441.0	1305.9	1166.1	1045.6	927.5	847.9	791.6	750.6	746.8
15°	1604.0	1549.9	1402.4	1227.9	1051.8	895.0	749.1	647.9	576.1	530.5	525.9
17.5°	1614.8	1546.0	1360.7	1146.0	940.6	749.9	587.7	482.7	414.7	377.6	373.8
20°	1624.8	1537.5	1307.4	1059.5	817.8	613.9	459.5	374.5	329.8	308.9	306.6
22.5°	1639.5	1529.8	1251.8	962.2	697.3	499.6	379.2	318.2	294.2	284.2	282.6
25°	1663.4	1530.6	1197.8	862.6	586.9	416.2	328.2	290.4	277.2	270.3	270.3
27.5°	1698.2	1539.9	1144.5	761.4	493.5	359.1	298.1	275.7	267.2	261.8	260.2
30°	1749.1	1556.9	1088.1	665.7	419.3	319.7	280.3	266.4	259.5	254.8	254.1
32.5°	1823.3	1587.0	1028.6	578.4	363.0	291.9	267.2	258.7	253.3	249.4	248.7
35°	1933.7	1640.3	970.7	504.3	322.8	271.8	256.4	249.4	246.3	244.8	244.0
37.5°	2095.9	1726.0	915.9	446.4	296.5	258.7	245.6	241.7	240.2	240.2	240.2
40°	2299.8	1838.7	866.5	405.4	281.9	248.7	237.9	234.8	234.8	235.5	235.5
42.5°	2547.7	1980.0	824.0	377.6	273.4	241.7	232.4	230.9	230.1	230.1	230.9
45°	2835.7	2146.9	797.7	356.0	267.2	237.9	228.6	227.8	224.7	223.2	223.2
47.5°	3125.3	2325.2	796.2	343.7	259.5	233.2	224.7	224.7	218.5	215.5	216.2
50°	3395.6	2485.1	813.2	340.6	254.8	226.3	220.9	221.6	213.1	209.3	208.5
52.5°	3613.4	2607.1	834.0	344.4	254.8	220.1	213.9	217.8	208.5	203.9	203.1
55°	3781.7	2692.1	841.8	352.9	257.9	214.7	207.7	213.9	207.0	200.8	200.8
57.5°	3902.2	2719.1	808.5	356.8	262.6	213.9	201.6	213.1	209.3	201.6	201.6
60°	3858.2	2562.3	685.0	342.1	261.8	212.4	196.9	214.7	217.0	208.5	208.5
62.5°	3514.5	2143.8	549.8	308.9	248.7	207.0	191.5	213.1	222.4	219.3	217.8
65°	2861.2	1572.3	426.3	269.5	226.3	195.4	179.9	199.2	210.1	213.1	213.9
67.5°	2016.3	995.4	331.3	229.4	198.5	178.4	166.8	176.1	179.9	181.5	184.6
70°	1102.8	539.0	263.3	193.1	169.9	161.4	152.9	153.7	152.1	150.6	152.1
72°	553.7	352.1	222.4	167.6	150.6	145.2	141.3	139.0	139.0	136.7	137.5
72.5°	476.5	327.4	214.7	161.4	146.0	141.3	138.2	135.9	135.1	133.6	134.4
75°	317.4	259.5	179.2	135.1	124.3	121.2	122.8	120.5	121.2	119.7	120.5
77.5°	256.4	223.2	152.1	114.3	106.6	101.9	105.0	105.8	107.3	105.8	105.0
80°	214.7	190.0	127.4	94.2	88.8	84.9	86.5	91.9	92.7	88.0	87.3
82.5°	139.0	152.9	100.4	73.4	68.0	66.4	70.3	75.7	77.2	71.0	69.5
85°	116.6	122.8	72.6	50.2	44.8	43.2	51.0	56.4	60.2	54.1	52.5
87.5°	32.4	60.2	35.5	23.9	20.1	20.1	24.7	29.3	34.8	35.5	35.5
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)