

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: P236869

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T2R-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21121 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

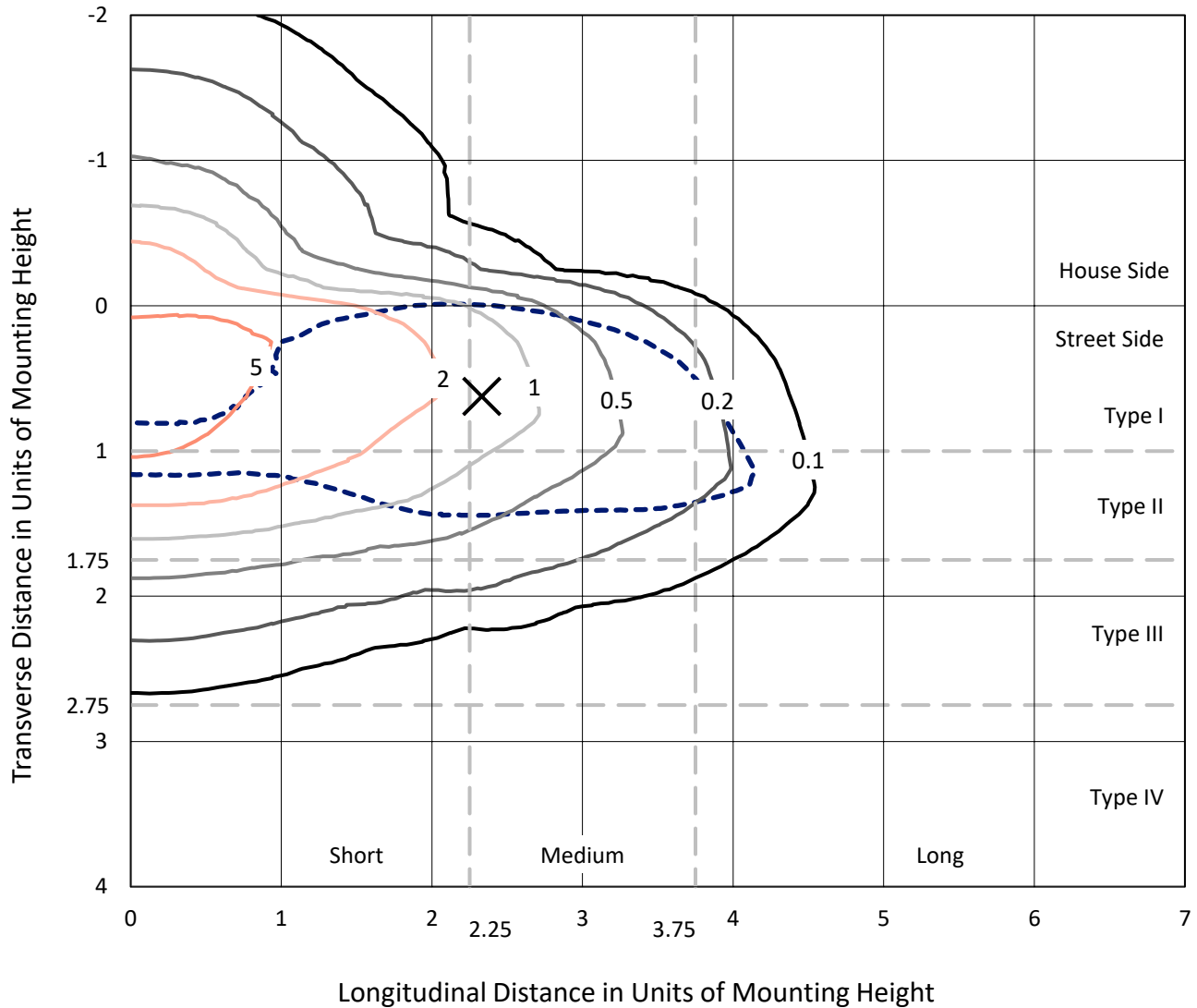
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

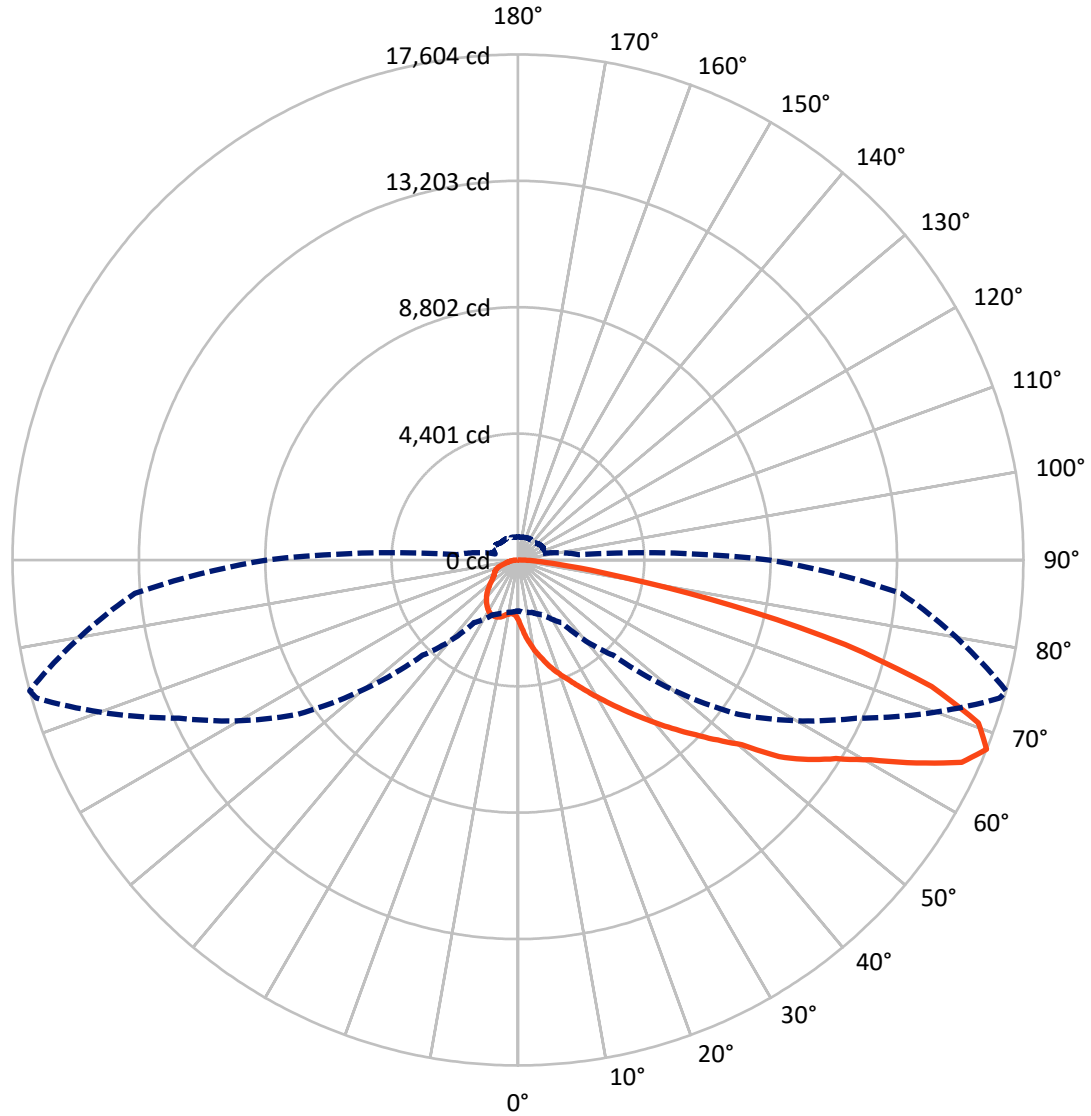
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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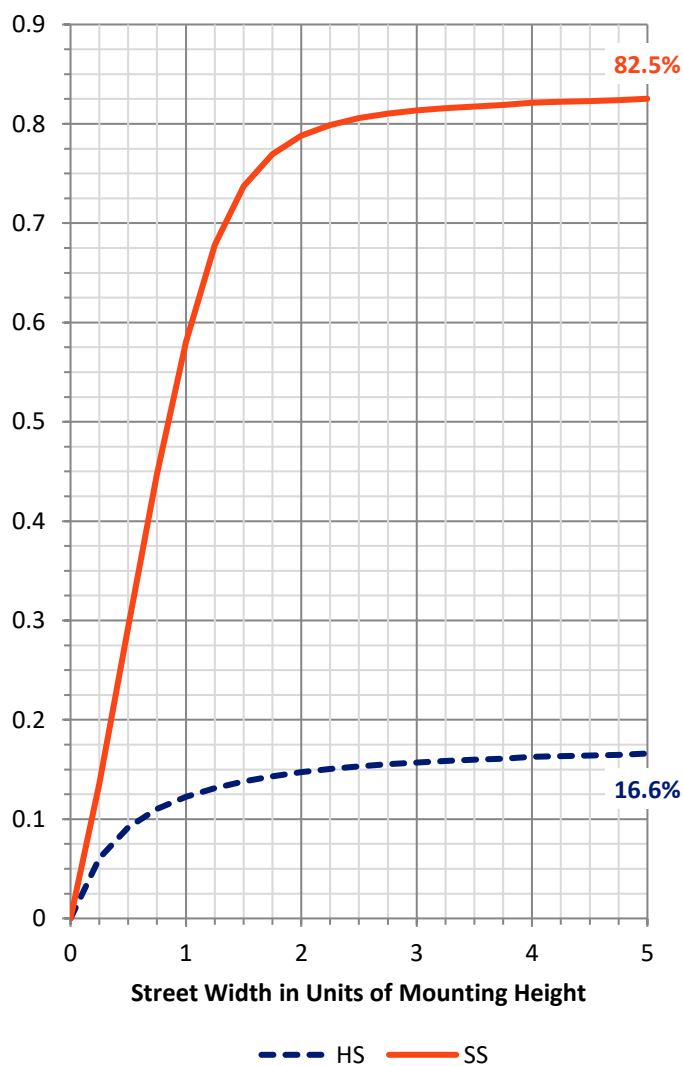
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3606.7	0.0	3606.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	17514.3	0.0	17514.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	21121.0	0.0	21121.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.9	1.2
10°-20°	888.5	4.2
20°-30°	1620.6	7.7
30°-40°	2660.1	12.6
40°-50°	3846.9	18.2
50°-60°	4533.6	21.5
60°-70°	4405.6	20.9
70°-80°	2448.9	11.6
80°-90°	470.9	2.2
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°	21121.0	100.0
0°-180°	21121.0	100.0

Coefficient of Utilization



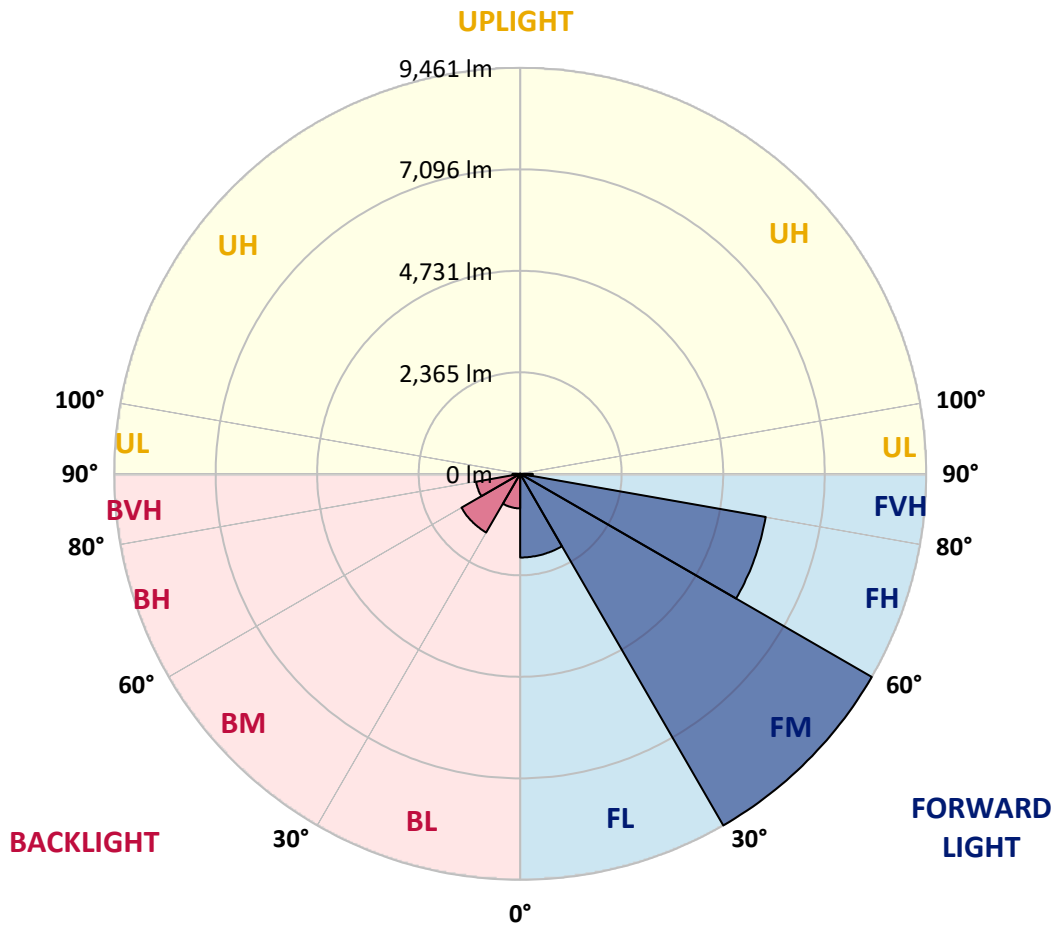
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1950.0	9.2			
FM (30°-60°)	9461.1	44.8			
FH (60°-80°)	5810.1	27.5			G3/7500
FVH (80°-90°)	293.1	1.4			G3/500
BL (0°-30°)	805.0	3.8	B2/1000		
BM (30°-60°)	1579.5	7.5	B2/2500		
BH (60°-80°)	1044.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	177.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9
2.5°	2967.1	2976.0	2958.3	2918.6	2861.2	2755.2	2662.5	2499.1	2353.4	2335.7	2181.2
5°	3488.1	3497.0	3474.9	3426.3	3364.5	3249.7	3121.7	2909.7	2675.7	2631.6	2304.8
7.5°	3845.8	3850.2	3823.7	3775.1	3726.6	3611.8	3483.7	3245.3	2958.3	2923.0	2463.8
10°	4150.4	4159.3	4124.0	4093.0	4040.1	3925.3	3792.8	3541.1	3245.3	3196.7	2627.1
12.5°	4433.0	4441.9	4419.8	4393.3	4375.6	4269.7	4124.0	3823.7	3505.8	3452.8	2821.4
15°	4622.9	4631.7	4636.1	4671.5	4693.5	4618.5	4472.8	4146.0	3788.4	3739.8	3051.0
17.5°	4569.9	4592.0	4658.2	4786.3	4923.1	4927.5	4808.3	4463.9	4066.6	4013.6	3285.0
20°	4415.4	4433.0	4512.5	4706.8	4976.1	5130.7	5121.8	4786.3	4327.1	4269.7	3501.4
22.5°	4543.4	4565.5	4565.5	4684.7	4949.6	5236.6	5351.4	5104.2	4587.6	4534.6	3717.7
25°	5090.9	5104.2	5011.4	4962.9	5060.0	5324.9	5541.3	5448.6	4905.5	4843.7	3951.8
27.5°	5854.8	5832.7	5717.9	5523.6	5417.7	5488.3	5709.1	5775.3	5271.9	5196.9	4194.6
30°	6614.2	6601.0	6468.5	6208.0	5969.6	5819.5	5894.5	6066.7	5669.3	5581.0	4428.6
32.5°	7325.1	7303.0	7157.3	6852.6	6583.3	6305.1	6159.4	6331.6	6093.2	5991.7	4689.1
35°	7978.6	7921.2	7775.5	7457.6	7179.4	6914.5	6556.8	6583.3	6552.4	6446.4	4976.1
37.5°	8508.4	8464.3	8305.3	8009.5	7713.6	7462.0	7086.7	6870.3	7046.9	6945.4	5307.3
40°	8976.4	8927.9	8764.5	8468.7	8194.9	7956.5	7660.7	7219.1	7603.3	7488.5	5678.2
42.5°	9329.7	9294.3	9161.9	8870.5	8605.6	8389.2	8243.5	7660.7	8181.7	8071.3	6084.4
45°	9519.5	9484.2	9413.6	9179.5	8936.7	8768.9	8782.2	8186.1	8786.6	8693.9	6565.7
47.5°	9285.5	9312.0	9373.8	9329.7	9179.5	9100.1	9263.4	8729.2	9462.1	9373.8	7086.7
50°	8658.5	8685.0	8932.3	9236.9	9289.9	9387.1	9696.1	9356.2	10177.4	10106.8	7731.3
52.5°	7117.6	7263.3	7947.7	8676.2	9175.1	9576.9	10177.4	10287.8	11382.8	11382.8	8870.5
55°	5377.9	5506.0	6287.5	7559.1	8729.2	9594.6	10530.7	10919.2	12252.6	12270.3	9466.5
57.5°	4358.0	4437.4	4821.6	6124.1	7793.1	9373.8	10950.1	11462.3	12976.8	13056.2	10234.8
60°	3536.7	3580.9	3832.5	4737.7	6499.4	8777.8	11250.4	12239.4	14010.0	14120.3	11215.0
62.5°	2843.5	2887.7	3055.4	3598.5	5099.7	7660.7	11197.4	13047.4	15387.6	15568.6	12499.9
65°	2269.5	2318.1	2428.5	2764.0	3779.6	6274.2	10654.3	13462.5	16813.7	16990.3	13352.1
67.5°	1770.6	1814.7	1889.8	2110.5	2662.5	4693.5	9369.4	13025.3	17453.9	17604.1	13396.2
70°	1337.9	1359.9	1421.7	1563.0	1903.0	3117.2	7333.9	11559.4	16879.9	17016.8	12513.2
72.5°	1037.6	1033.2	1068.5	1139.2	1329.0	2145.9	4861.3	9400.3	14923.9	15065.2	10676.4
75°	847.8	843.3	865.4	887.5	962.6	1439.4	2870.0	7077.8	12045.1	11775.8	8009.5
77.5°	715.3	710.9	733.0	737.4	768.3	993.5	1633.7	4658.2	8036.0	7572.4	4512.5
80°	604.9	600.5	627.0	635.8	657.9	728.5	940.5	2521.2	4035.6	3823.7	2154.7
82.5°	454.8	472.4	521.0	543.1	569.6	538.7	582.8	1112.7	1872.1	1788.2	936.1
85°	220.8	260.5	393.0	437.1	468.0	340.0	397.4	525.4	843.3	803.6	379.7
87.5°	75.1	66.2	234.0	278.2	304.7	154.5	220.8	291.4	348.8	317.9	119.2
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°	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9	2092.9
2.5°	2115.0	2048.7	1951.6	1876.5	1828.0	1788.2	1770.6	1766.1	1757.3	1752.9	1752.9
5°	2159.1	2039.9	1889.8	1810.3	1788.2	1770.6	1779.4	1783.8	1783.8	1783.8	1783.8
7.5°	2225.3	2057.6	1876.5	1823.5	1819.1	1819.1	1845.6	1858.9	1867.7	1867.7	1867.7
10°	2313.7	2088.5	1898.6	1854.5	1867.7	1876.5	1907.4	1925.1	1933.9	1938.3	1942.8
12.5°	2432.9	2154.7	1942.8	1907.4	1925.1	1929.5	1951.6	1960.4	1969.3	1973.7	1973.7
15°	2591.8	2251.8	2013.4	1969.3	1973.7	1969.3	1969.3	1960.4	1956.0	1956.0	1964.8
17.5°	2755.2	2344.6	2075.2	2013.4	1995.7	1960.4	1933.9	1911.9	1898.6	1889.8	1894.2
20°	2918.6	2428.5	2110.5	2022.2	1973.7	1916.3	1867.7	1836.8	1819.1	1801.5	1810.3
22.5°	3081.9	2507.9	2123.8	1995.7	1925.1	1841.2	1788.2	1739.7	1699.9	1673.4	1677.8
25°	3263.0	2596.2	2123.8	1964.8	1858.9	1770.6	1704.3	1624.9	1567.5	1545.4	1554.2
27.5°	3444.0	2671.3	2101.7	1907.4	1783.8	1695.5	1598.4	1505.6	1470.3	1457.1	1461.5
30°	3625.0	2728.7	2053.1	1836.8	1704.3	1607.2	1479.1	1417.3	1373.2	1337.9	1342.3
32.5°	3806.0	2768.4	1986.9	1748.5	1620.4	1496.8	1390.8	1320.2	1240.7	1196.6	1201.0
35°	4013.6	2799.3	1907.4	1660.2	1527.7	1399.7	1320.2	1205.4	1121.5	1086.2	1077.3
37.5°	4229.9	2821.4	1823.5	1563.0	1435.0	1329.0	1249.5	1108.3	1028.8	980.2	975.8
40°	4463.9	2830.3	1722.0	1461.5	1346.7	1284.9	1156.8	1050.9	914.0	883.1	883.1
42.5°	4742.1	2825.8	1620.4	1359.9	1249.5	1183.3	1090.6	1042.0	922.8	891.9	874.2
45°	5060.0	2825.8	1510.1	1240.7	1152.4	1055.3	1015.5	984.6	905.2	918.4	927.2
47.5°	5422.1	2817.0	1377.6	1143.6	1072.9	989.0	967.0	900.7	869.8	878.7	887.5
50°	5921.0	2830.3	1258.4	1064.1	1015.5	944.9	918.4	883.1	869.8	874.2	869.8
52.5°	6614.2	2786.1	1143.6	1015.5	971.4	878.7	878.7	874.2	878.7	874.2	874.2
55°	6993.9	2689.0	1059.7	989.0	940.5	847.8	865.4	874.2	883.1	878.7	878.7
57.5°	7532.6	2622.7	993.5	971.4	922.8	838.9	856.6	874.2	878.7	874.2	874.2
60°	8168.4	2578.6	949.3	975.8	909.6	838.9	861.0	874.2	869.8	865.4	865.4
62.5°	8905.8	2560.9	918.4	989.0	896.3	843.3	861.0	874.2	856.6	852.2	852.2
65°	9184.0	2402.0	878.7	997.9	905.2	843.3	856.6	861.0	838.9	834.5	830.1
67.5°	8755.7	2128.2	821.3	980.2	931.6	843.3	843.3	838.9	812.4	808.0	799.2
70°	7797.5	1766.1	733.0	922.8	949.3	847.8	825.7	803.6	777.1	777.1	759.4
72.5°	6384.6	1390.8	618.2	821.3	936.1	861.0	790.4	759.4	728.5	728.5	710.9
75°	4600.8	1037.6	494.5	684.4	878.7	856.6	746.2	706.5	671.1	666.7	644.6
77.5°	2622.7	728.5	401.8	534.3	781.5	834.5	706.5	644.6	604.9	591.7	578.4
80°	1346.7	490.1	326.7	419.5	649.1	772.7	675.6	574.0	529.8	507.8	485.7
82.5°	640.2	326.7	251.7	309.1	490.1	675.6	635.8	494.5	446.0	419.5	393.0
85°	287.0	194.3	167.8	198.7	348.8	525.4	560.8	406.2	348.8	437.1	322.3
87.5°	92.7	88.3	88.3	92.7	167.8	229.6	410.6	300.2	278.2	229.6	194.3
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)