

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: P399751

Luminaire Tested: **ARCH-L-PA3-180-830-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-180-830-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21400 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

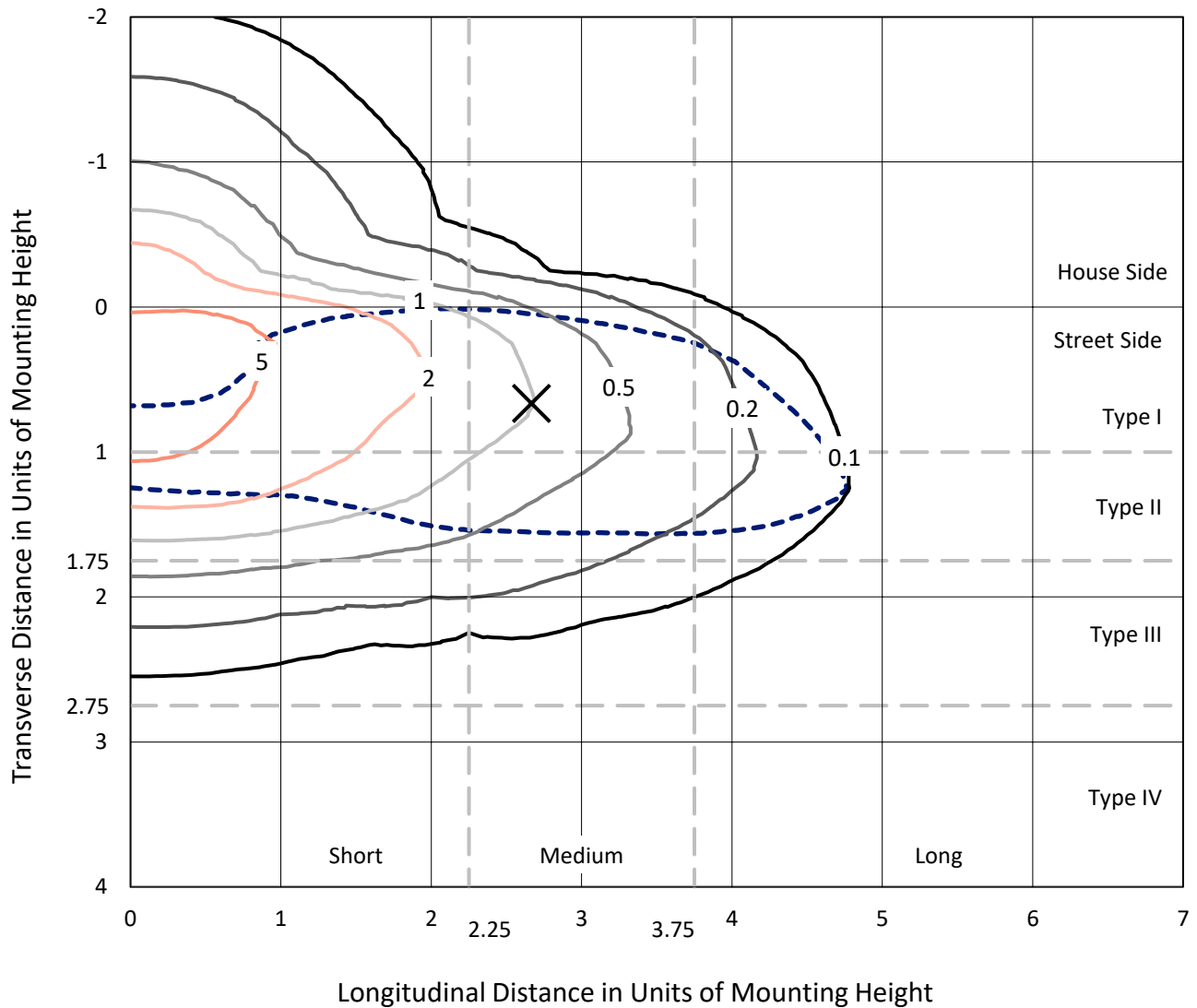
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

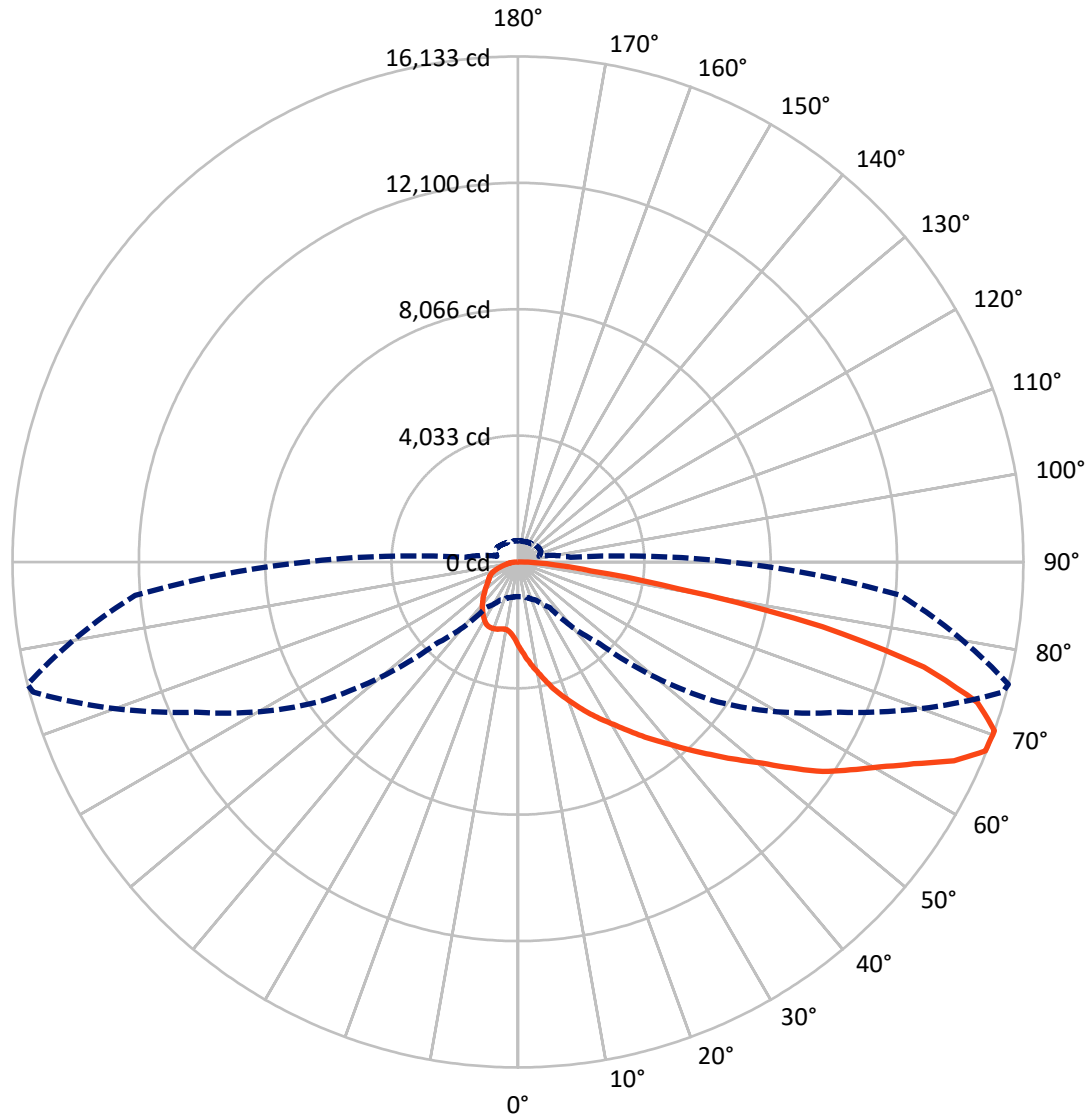
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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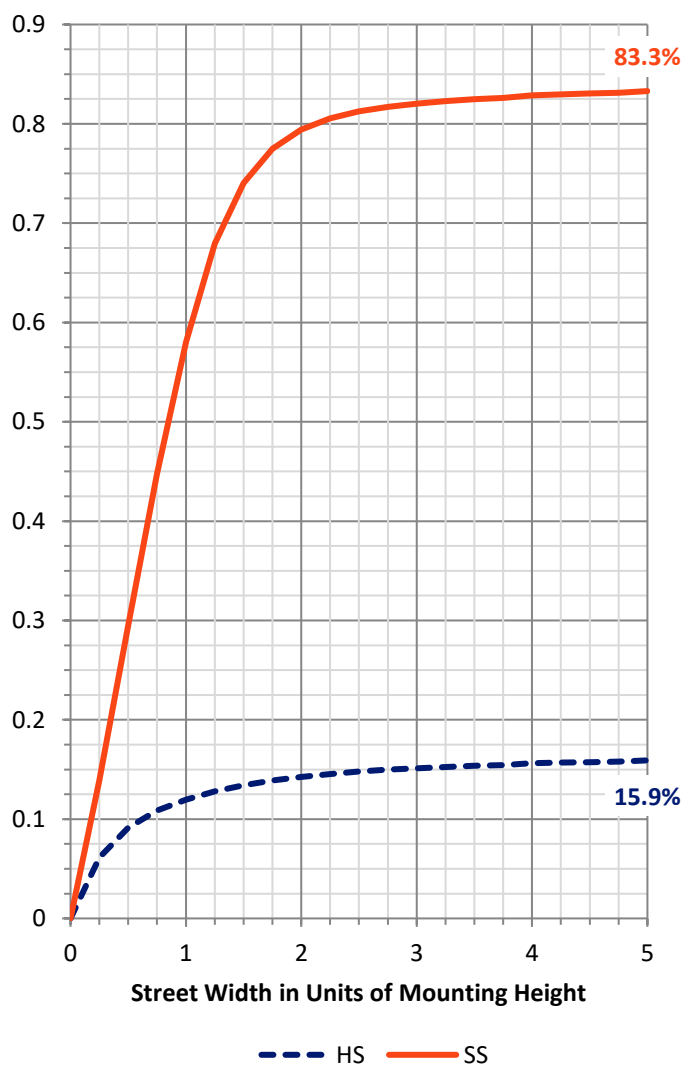
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3493.8	0.0	3493.8
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	17906.2	0.0	17906.2
	% Fixture	83.7	0.0	83.7
Total	Lumens	21400.0	0.0	21400.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	1.3
10°-20°	945.1	4.4
20°-30°	1690.8	7.9
30°-40°	2735.2	12.8
40°-50°	3956.8	18.5
50°-60°	4528.8	21.2
60°-70°	4166.0	19.5
70°-80°	2576.2	12.0
80°-90°	523.1	2.4
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°	21400.0	100.0
0°-180°	21400.0	100.0

Coefficient of Utilization



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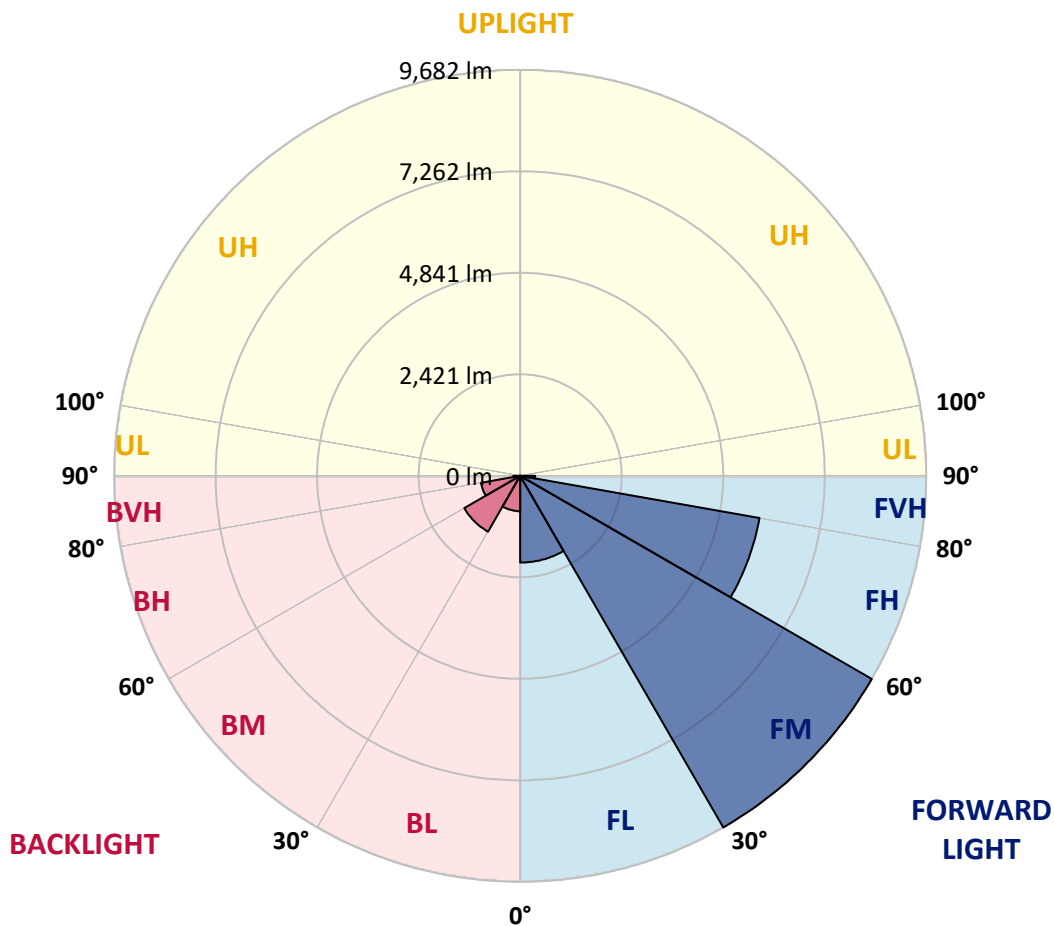
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2070.1	9.7			
FM (30°-60°)	9682.5	45.2			
FH (60°-80°)	5794.5	27.1			G3/7500
FVH (80°-90°)	359.1	1.7			G3/500
BL (0°-30°)	843.9	3.9	B2/1000		
BM (30°-60°)	1538.3	7.2	B2/2500		
BH (60°-80°)	947.6	4.4	B2/1000		G2/1000
BVH (80°-90°)	164.0	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2
2.5°	3410.6	3385.3	3382.5	3343.1	3306.5	3208.0	3137.7	3013.8	2890.0	2887.2	2763.4
5°	3942.5	3917.2	3903.1	3855.2	3793.3	3663.9	3537.3	3345.9	3134.9	3120.8	2887.2
7.5°	4302.7	4280.2	4252.0	4232.3	4173.2	4057.9	3903.1	3675.1	3385.3	3357.2	3030.7
10°	4544.7	4530.6	4525.0	4510.9	4474.3	4381.5	4232.3	3990.3	3635.8	3604.8	3182.7
12.5°	4648.8	4643.2	4668.5	4707.9	4722.0	4685.4	4541.9	4313.9	3911.5	3877.8	3365.6
15°	4527.8	4533.4	4598.2	4733.2	4876.7	4955.5	4871.1	4648.8	4223.9	4176.1	3579.5
17.5°	4471.5	4480.0	4525.0	4654.4	4857.1	5101.9	5141.3	4966.8	4525.0	4457.5	3804.6
20°	4570.0	4581.3	4615.0	4716.3	4857.1	5118.8	5324.2	5270.7	4820.5	4750.1	4021.3
22.5°	4820.5	4834.5	4831.7	4896.4	4992.1	5172.2	5425.5	5557.7	5130.0	5051.2	4246.4
25°	5355.1	5343.9	5248.2	5217.2	5242.6	5358.0	5560.6	5833.5	5453.6	5374.8	4482.8
27.5°	6081.2	6067.1	5892.6	5735.0	5594.3	5645.0	5751.9	6055.8	5782.9	5692.8	4707.9
30°	6857.8	6841.0	6638.3	6382.3	6069.9	5996.7	5982.7	6250.0	6114.9	6019.3	4947.1
32.5°	7614.8	7600.7	7384.1	7085.8	6655.2	6435.7	6300.7	6466.7	6492.0	6399.1	5208.8
35°	8304.3	8304.3	8118.5	7764.0	7277.1	6945.1	6722.8	6734.0	6925.4	6818.4	5507.1
37.5°	8917.7	8914.9	8712.3	8363.4	7896.2	7516.3	7240.6	7057.6	7339.0	7246.2	5819.5
40°	9404.6	9384.9	9235.7	8931.8	8461.8	8084.8	7806.2	7437.5	7800.5	7716.1	6151.5
42.5°	9759.1	9747.9	9646.6	9382.0	8934.6	8580.0	8388.7	7915.9	8324.0	8239.5	6539.9
45°	9897.0	9919.5	9919.5	9669.1	9314.5	8990.9	8906.5	8442.2	8889.6	8805.2	6956.3
47.5°	9674.7	9733.8	9854.8	9871.7	9559.3	9339.8	9368.0	8971.2	9472.1	9427.1	7412.2
50°	8979.6	9089.4	9353.9	9832.3	9657.8	9607.2	9761.9	9511.5	10096.8	10082.7	7966.6
52.5°	7187.1	7454.4	8278.9	9137.2	9590.3	9731.0	10153.1	10119.3	10901.6	10924.1	8689.8
55°	5512.7	5614.0	6568.0	8028.5	9176.6	9691.6	10414.8	10713.1	11774.0	11802.1	9353.9
57.5°	4457.5	4525.0	5045.6	6568.0	8233.9	9477.7	10620.2	11059.2	12443.7	12516.9	9944.9
60°	3531.6	3630.1	3979.1	5025.9	6914.1	8962.7	10763.7	11444.7	13164.1	13273.9	10651.2
62.5°	2625.5	2673.3	3002.6	3723.0	5473.3	8036.9	10687.8	11864.0	14047.7	14180.0	11501.0
65°	1868.5	1910.7	2144.3	2648.0	4046.6	6784.7	10246.0	12176.4	15156.5	15291.5	12356.5
67.5°	1398.6	1415.5	1547.7	1851.6	2726.8	5270.7	9351.1	12122.9	15966.9	16087.9	12699.8
70°	1105.9	1111.5	1176.3	1339.5	1772.9	3669.5	7783.7	11337.8	16026.0	16132.9	12266.4
72.5°	917.4	914.6	951.1	1029.9	1235.4	2321.6	5766.0	9880.1	15266.2	15339.4	11056.4
75°	757.0	762.6	787.9	833.0	942.7	1530.8	3737.1	7882.2	13468.0	13389.2	9277.9
77.5°	636.0	633.2	644.4	683.8	762.6	1100.3	2189.3	5695.6	9981.4	9942.0	6089.6
80°	512.2	517.8	534.7	568.4	641.6	838.6	1294.5	3554.1	5355.1	5211.6	2909.7
82.5°	343.3	396.8	430.5	469.9	554.4	619.1	821.7	1806.6	2394.8	2358.2	1319.8
85°	163.2	216.7	320.8	365.8	450.2	388.3	557.2	861.1	1198.8	1184.7	475.6
87.5°	33.8	33.8	171.7	205.4	278.6	166.0	309.5	374.3	579.7	543.1	194.2
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°	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2	2676.2
2.5°	2690.2	2614.3	2462.3	2341.3	2217.5	2147.1	2059.9	2017.7	2009.2	1986.7	2003.6
5°	2738.1	2588.9	2301.9	2113.4	1986.7	1924.8	1893.9	1882.6	1879.8	1874.2	1874.2
7.5°	2802.8	2574.9	2200.6	2009.2	1927.6	1907.9	1916.4	1933.3	1936.1	1941.7	1938.9
10°	2881.6	2577.7	2144.3	1983.9	1944.5	1947.3	1975.5	1998.0	2009.2	2017.7	2014.9
12.5°	2991.3	2611.4	2135.9	2000.8	1983.9	1995.2	2023.3	2045.8	2057.1	2059.9	2059.9
15°	3134.9	2681.8	2155.6	2037.4	2023.3	2031.7	2048.6	2057.1	2059.9	2057.1	2057.1
17.5°	3292.4	2766.2	2183.7	2059.9	2037.4	2028.9	2023.3	2014.9	1998.0	1986.7	1986.7
20°	3444.4	2842.2	2197.8	2057.1	2017.7	1983.9	1950.1	1907.9	1879.8	1857.3	1857.3
22.5°	3596.4	2912.5	2197.8	2026.1	1964.2	1899.5	1829.1	1761.6	1719.4	1691.2	1691.2
25°	3756.8	2980.1	2180.9	1972.6	1879.8	1786.9	1691.2	1606.8	1564.6	1536.5	1530.8
27.5°	3891.8	3019.5	2135.9	1896.7	1775.7	1657.5	1547.7	1460.5	1429.5	1404.2	1404.2
30°	4035.3	3044.8	2051.4	1798.2	1657.5	1522.4	1409.8	1339.5	1305.7	1269.1	1266.3
32.5°	4195.7	3061.7	1955.8	1694.1	1536.5	1393.0	1297.3	1241.0	1167.8	1128.4	1122.8
35°	4381.5	3084.2	1854.5	1575.9	1415.5	1286.0	1229.7	1136.9	1066.5	1032.8	1029.9
37.5°	4578.5	3101.1	1744.7	1471.7	1305.7	1215.7	1159.4	1049.6	987.7	937.1	931.5
40°	4786.7	3101.1	1632.1	1370.4	1218.5	1184.7	1077.8	979.3	875.2	849.8	844.2
42.5°	5017.5	3095.5	1519.6	1272.0	1136.9	1114.4	1029.9	925.8	872.4	849.8	844.2
45°	5262.3	3075.8	1412.7	1159.4	1052.5	1007.4	942.7	914.6	892.1	892.1	892.1
47.5°	5540.9	3058.9	1291.6	1058.1	990.5	939.9	892.1	875.2	872.4	880.8	889.2
50°	5898.2	3053.2	1190.3	984.9	942.7	883.6	878.0	863.9	866.7	866.7	866.7
52.5°	6331.6	3002.6	1094.7	931.5	894.9	824.5	841.4	855.5	861.1	858.3	855.5
55°	6649.6	2912.5	1013.1	894.9	861.1	802.0	824.5	847.0	852.7	844.2	844.2
57.5°	6936.6	2785.9	948.3	866.7	838.6	787.9	813.3	835.8	830.1	827.3	824.5
60°	7265.9	2664.9	897.7	852.7	816.1	782.3	804.8	818.9	810.4	804.8	802.0
62.5°	7623.3	2546.7	861.1	852.7	799.2	779.5	796.4	802.0	785.1	779.5	779.5
65°	7789.3	2361.0	821.7	852.7	790.7	773.9	779.5	773.9	757.0	757.0	754.2
67.5°	7516.3	2054.3	771.0	841.4	802.0	765.4	754.2	745.7	726.0	726.0	720.4
70°	6762.2	1688.4	697.9	804.8	804.8	762.6	720.4	700.7	678.2	686.6	675.4
72.5°	5777.2	1339.5	607.8	742.9	787.9	759.8	683.8	652.9	633.2	641.6	624.7
75°	4679.8	1038.4	500.9	644.4	745.7	745.7	647.2	605.0	582.5	582.5	562.8
77.5°	2982.9	768.2	408.0	534.7	669.7	726.0	616.3	551.6	517.8	509.3	495.3
80°	1477.4	540.3	334.9	424.9	571.3	681.0	593.8	489.6	441.8	424.9	399.6
82.5°	785.1	374.3	267.3	332.1	455.9	613.5	565.6	422.1	363.0	337.7	309.5
85°	351.8	230.8	213.9	253.3	346.1	503.7	509.3	346.1	278.6	332.1	244.8
87.5°	129.4	104.1	104.1	129.4	199.8	211.1	360.2	222.3	177.3	121.0	95.7
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)