

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: P572699

Luminaire Tested: **ARCH-S-PA2-100-827-U-T2R**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-100-827-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10260 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

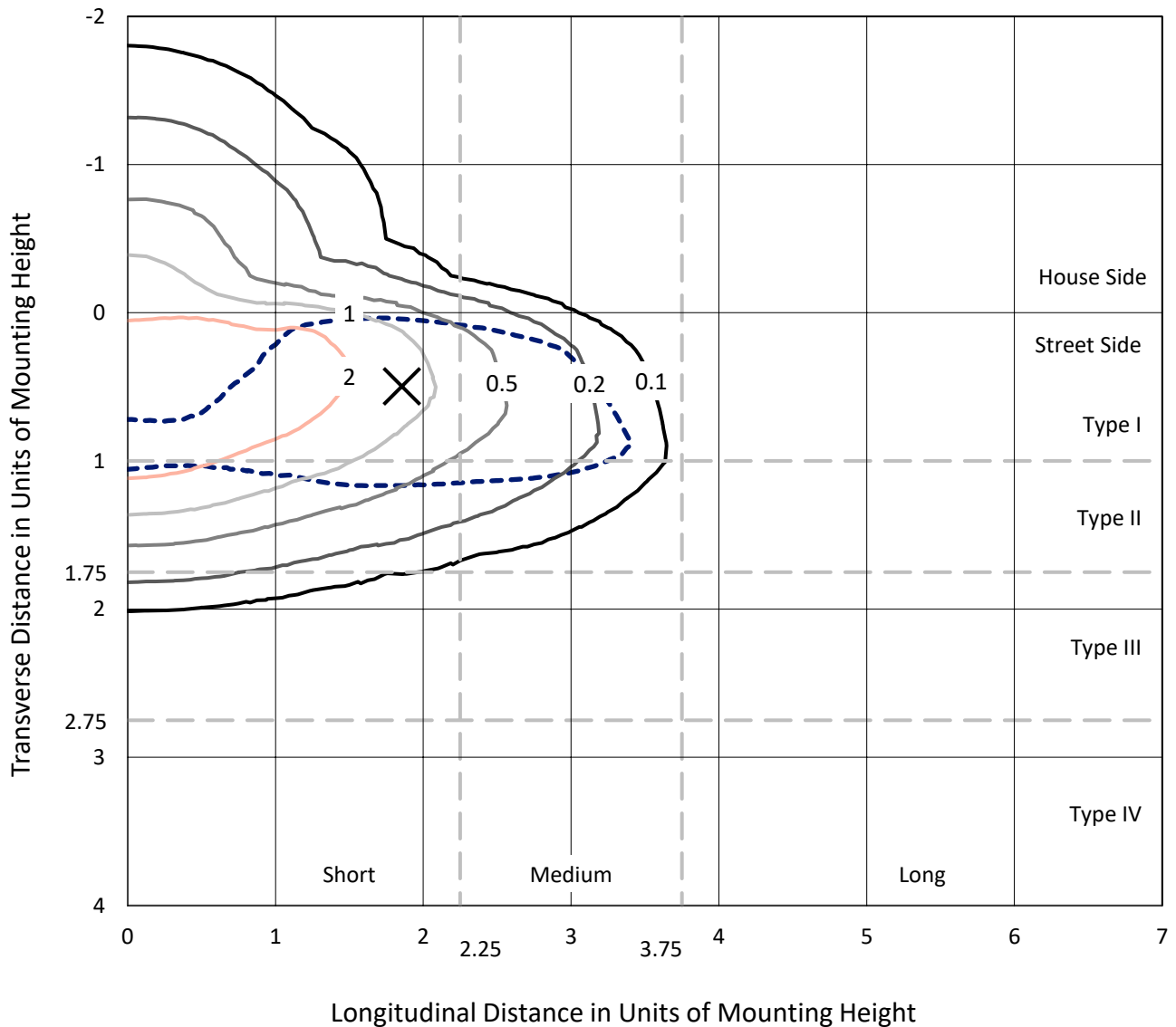
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

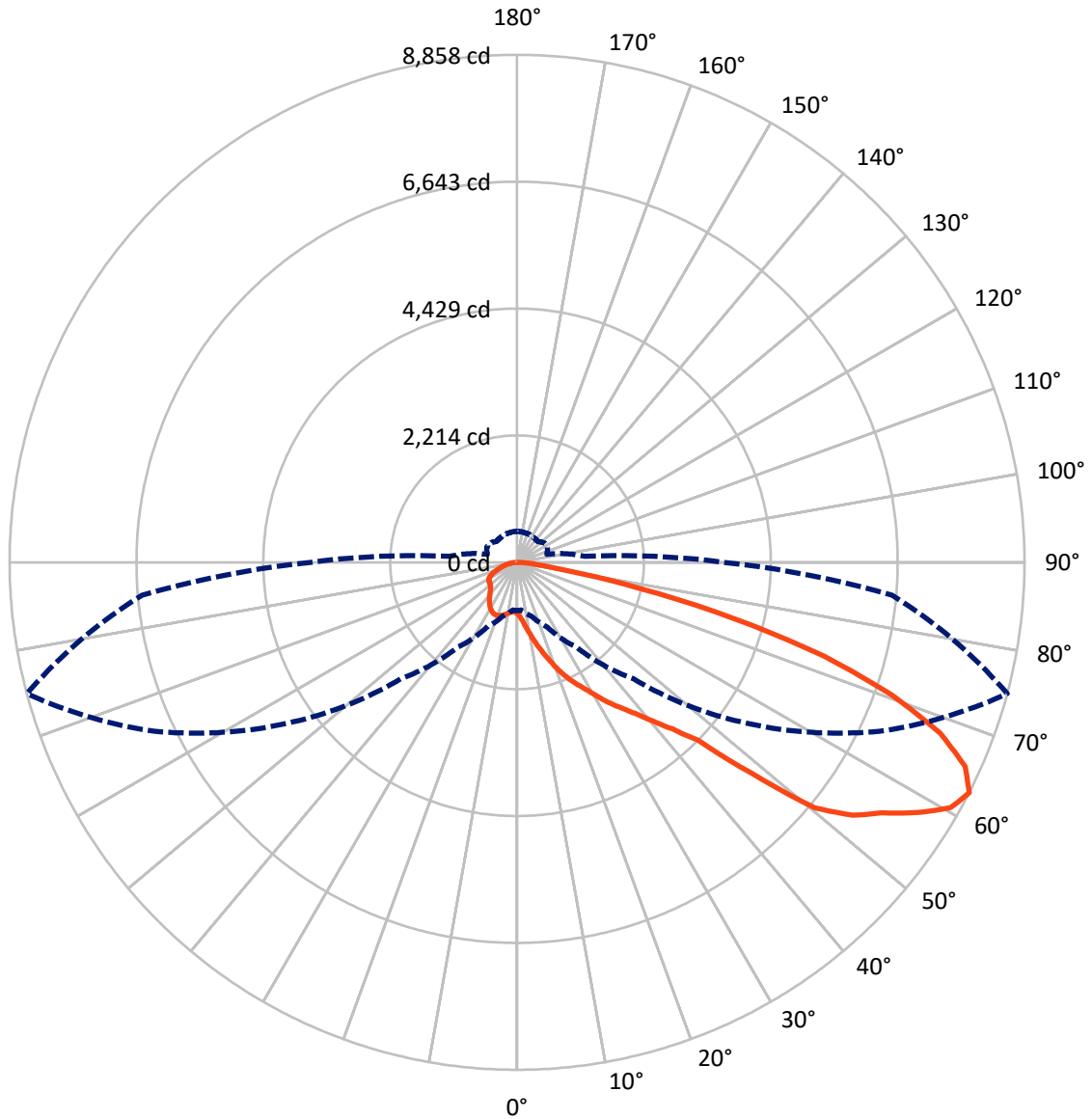
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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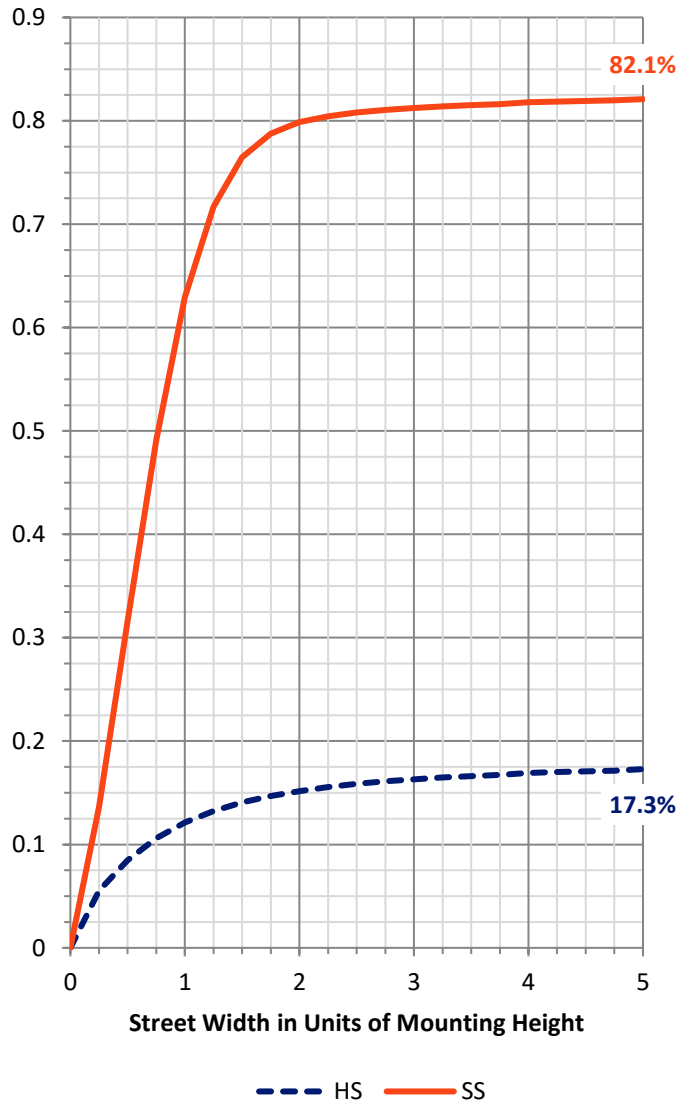
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1809.6	0.0	1809.6
	% Fixture	17.6	0.0	17.6
Street Side	Lumens	8450.4	0.0	8450.4
	% Fixture	82.4	0.0	82.4
Total	Lumens	10260.0	0.0	10260.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	1.0
10°-20°	424.6	4.1
20°-30°	839.9	8.2
30°-40°	1400.1	13.6
40°-50°	2066.0	20.1
50°-60°	2483.5	24.2
60°-70°	1930.1	18.8
70°-80°	853.9	8.3
80°-90°	154.6	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°	10260.0	100.0
0°-180°	10260.0	100.0

Coefficient of Utilization

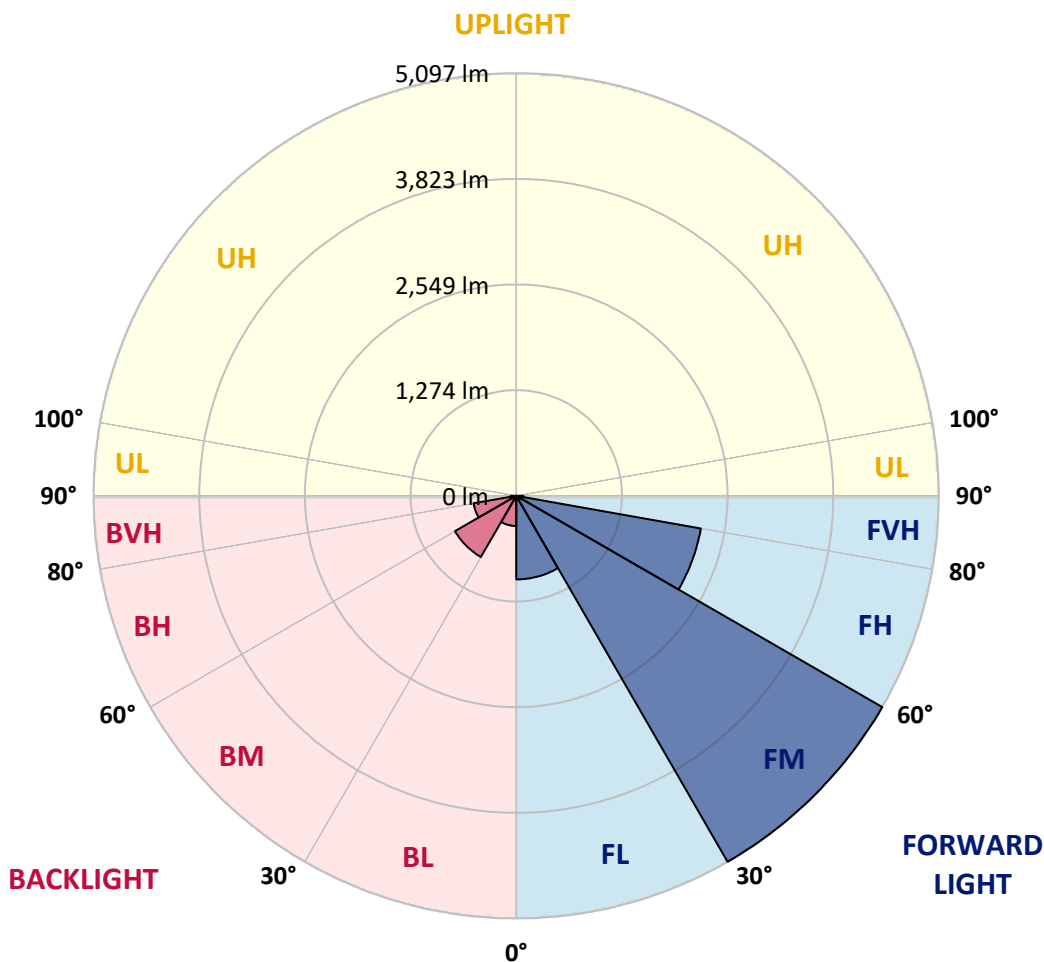


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1007.8	9.8			
FM (30°-60°)	5097.2	49.7			
FH (60°-80°)	2260.5	22.0			G2/5000
FVH (80°-90°)	85.0	0.8			G1/100
BL (0°-30°)	364.1	3.5	B1/500		
BM (30°-60°)	852.3	8.3	B1/1000		
BH (60°-80°)	523.5	5.1	B2/1000		G2/1000
BVH (80°-90°)	69.6	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3
2.5°	1143.5	1110.3	1110.3	1074.3	1077.1	1046.6	1013.4	980.2	944.2	916.5	902.6
5°	1495.2	1470.2	1461.9	1420.4	1354.0	1279.2	1198.9	1115.8	1030.0	963.6	930.3
7.5°	1824.7	1805.3	1794.2	1747.1	1655.8	1575.5	1448.1	1295.8	1149.1	1024.5	974.6
10°	2068.3	2054.5	2032.3	2010.2	1943.7	1874.5	1716.7	1500.7	1284.7	1099.2	1024.5
12.5°	2245.5	2226.1	2226.1	2223.4	2179.1	2115.4	1968.6	1736.1	1442.6	1182.3	1079.8
15°	2364.6	2361.8	2370.1	2386.7	2375.7	2334.1	2187.4	1952.0	1603.2	1276.4	1143.5
17.5°	2453.2	2442.1	2458.7	2503.0	2536.2	2519.6	2397.8	2159.7	1780.4	1378.9	1212.7
20°	2550.1	2527.9	2550.1	2605.5	2647.0	2671.9	2613.8	2359.0	1971.4	1489.6	1279.2
22.5°	2735.6	2732.8	2721.8	2738.4	2766.1	2810.4	2777.1	2561.2	2156.9	1600.4	1356.7
25°	3067.9	3037.4	3006.9	2971.0	2940.5	2954.3	2926.6	2749.4	2325.8	1722.2	1423.2
27.5°	3438.9	3405.7	3350.3	3261.7	3178.6	3128.8	3070.6	2912.8	2489.2	1833.0	1486.9
30°	3779.4	3768.4	3685.3	3588.4	3444.4	3353.0	3242.3	3101.1	2685.8	1954.8	1553.3
32.5°	4097.9	4075.7	3992.6	3890.2	3721.3	3618.9	3466.6	3306.0	2910.0	2104.3	1622.5
35°	4372.0	4349.8	4252.9	4122.8	3976.0	3887.4	3713.0	3488.7	3114.9	2234.4	1680.7
37.5°	4579.6	4554.7	4463.3	4336.0	4205.8	4164.3	4014.8	3721.3	3347.5	2397.8	1752.7
40°	4695.9	4665.5	4604.6	4516.0	4408.0	4388.6	4324.9	4009.3	3641.0	2597.2	1857.9
42.5°	4709.8	4682.1	4648.9	4640.6	4632.2	4648.9	4679.3	4336.0	3976.0	2863.0	2012.9
45°	4587.9	4571.3	4574.1	4668.2	4798.4	4950.7	5133.4	4817.8	4427.4	3369.7	2361.8
47.5°	4327.7	4319.4	4380.3	4538.1	4828.8	5174.9	5692.7	5642.9	5496.1	4186.5	2810.4
50°	3906.8	3893.0	4023.1	4272.3	4687.6	5249.7	6069.3	6614.7	6736.6	4820.5	3103.9
52.5°	3303.2	3319.8	3521.9	3862.5	4363.7	5169.4	6224.3	7013.4	7334.6	5288.5	3328.1
55°	2685.8	2660.8	2843.6	3264.4	3884.7	4875.9	6254.8	7243.2	7722.3	5720.4	3546.9
57.5°	1957.6	2018.5	2212.3	2594.4	3267.2	4344.3	6077.6	7401.1	8242.8	6152.3	3749.0
60°	1326.3	1326.3	1497.9	1880.0	2525.2	3699.2	5604.1	7342.9	8696.9	6490.1	3793.3
62.5°	844.5	836.2	974.6	1246.0	1808.0	2874.0	4895.3	6977.4	8857.5	6570.4	3607.8
65°	534.4	545.5	595.3	761.4	1157.4	2040.6	3929.0	6249.2	8594.4	6384.9	3283.8
67.5°	429.2	431.9	456.9	526.1	711.6	1309.7	2912.8	5244.2	7965.9	5917.0	2904.5
70°	379.3	384.9	390.4	415.3	487.3	827.9	1913.3	4222.5	6935.9	5102.9	2497.5
72.5°	346.1	351.6	357.2	362.7	401.5	539.9	1129.7	3200.8	5595.8	3920.7	1905.0
75°	318.4	324.0	324.0	326.7	348.9	401.5	620.2	2206.8	3895.7	2439.3	1187.8
77.5°	285.2	288.0	288.0	293.5	315.6	315.6	384.9	1365.0	2162.5	1104.8	600.8
80°	240.9	246.4	246.4	254.7	276.9	243.7	257.5	697.7	897.1	454.1	268.6
82.5°	177.2	188.3	193.8	207.7	221.5	185.5	185.5	351.6	379.3	202.1	144.0
85°	96.9	99.7	144.0	155.1	163.4	110.8	124.6	174.4	188.3	88.6	72.0
87.5°	27.7	30.5	69.2	85.8	77.5	47.1	52.6	66.5	66.5	24.9	19.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3	894.3
2.5°	891.6	869.4	850.0	836.2	822.3	814.0	811.3	805.7	805.7	808.5
5°	902.6	863.9	833.4	816.8	805.7	800.2	797.4	797.4	800.2	800.2
7.5°	930.3	872.2	844.5	830.6	819.6	814.0	814.0	811.3	814.0	814.0
10°	969.1	897.1	866.6	850.0	841.7	833.4	830.6	827.9	827.9	827.9
12.5°	1010.6	924.8	891.6	872.2	858.3	847.3	841.7	836.2	833.4	833.4
15°	1049.4	952.5	908.2	886.0	866.6	850.0	839.0	830.6	827.9	827.9
17.5°	1090.9	971.9	919.3	888.8	863.9	841.7	827.9	816.8	811.3	811.3
20°	1135.2	985.7	919.3	880.5	847.3	825.1	808.5	797.4	786.3	786.3
22.5°	1171.2	991.2	908.2	861.1	827.9	800.2	783.6	769.7	761.4	761.4
25°	1201.7	985.7	883.3	830.6	791.9	767.0	750.4	739.3	731.0	731.0
27.5°	1221.1	963.6	852.8	797.4	761.4	736.5	725.4	714.4	708.8	708.8
30°	1232.1	935.9	814.0	761.4	725.4	711.6	706.1	695.0	686.7	683.9
32.5°	1237.7	894.3	775.3	725.4	700.5	695.0	695.0	681.1	670.1	667.3
35°	1232.1	850.0	736.5	695.0	686.7	689.4	683.9	667.3	653.4	647.9
37.5°	1223.8	797.4	695.0	672.8	681.1	686.7	670.1	647.9	625.8	620.2
40°	1218.3	750.4	661.7	650.7	675.6	678.4	647.9	606.4	589.8	584.2
42.5°	1246.0	703.3	631.3	634.1	661.7	664.5	609.1	589.8	578.7	575.9
45°	1340.1	661.7	606.4	623.0	645.1	634.1	589.8	587.0	578.7	575.9
47.5°	1412.1	631.3	595.3	614.7	631.3	592.5	587.0	584.2	575.9	573.1
50°	1437.0	611.9	592.5	609.1	611.9	573.1	581.5	581.5	573.1	570.4
52.5°	1439.8	600.8	598.1	606.4	581.5	564.8	575.9	575.9	567.6	564.8
55°	1450.9	595.3	600.8	606.4	548.2	553.8	564.8	567.6	559.3	556.5
57.5°	1428.7	587.0	606.4	609.1	534.4	542.7	553.8	553.8	553.8	553.8
60°	1342.9	570.4	603.6	603.6	523.3	528.8	539.9	545.5	548.2	548.2
62.5°	1185.1	537.2	587.0	587.0	512.2	517.8	531.6	531.6	539.9	539.9
65°	985.7	490.1	553.8	551.0	501.2	506.7	523.3	517.8	531.6	534.4
67.5°	822.3	431.9	503.9	509.5	490.1	503.9	515.0	495.6	523.3	523.3
70°	656.2	362.7	437.5	462.4	470.7	506.7	498.4	467.9	503.9	495.6
72.5°	509.5	307.3	359.9	404.2	448.5	503.9	462.4	429.2	451.3	437.5
75°	371.0	254.7	296.3	335.0	418.1	495.6	426.4	376.6	376.6	371.0
77.5°	260.3	207.7	238.1	265.8	387.6	473.5	382.1	324.0	310.1	307.3
80°	177.2	163.4	188.3	204.9	343.3	429.2	329.5	268.6	243.7	238.1
82.5°	116.3	116.3	127.4	138.4	265.8	357.2	257.5	199.4	257.5	246.4
85°	66.5	69.2	69.2	80.3	146.7	252.0	182.7	199.4	119.1	110.8
87.5°	22.2	22.2	22.2	22.2	30.5	102.4	77.5	72.0	27.7	24.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)