

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: P265705

Luminaire Tested: **ARCH-L-AF72-230-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16724.5 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 229
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

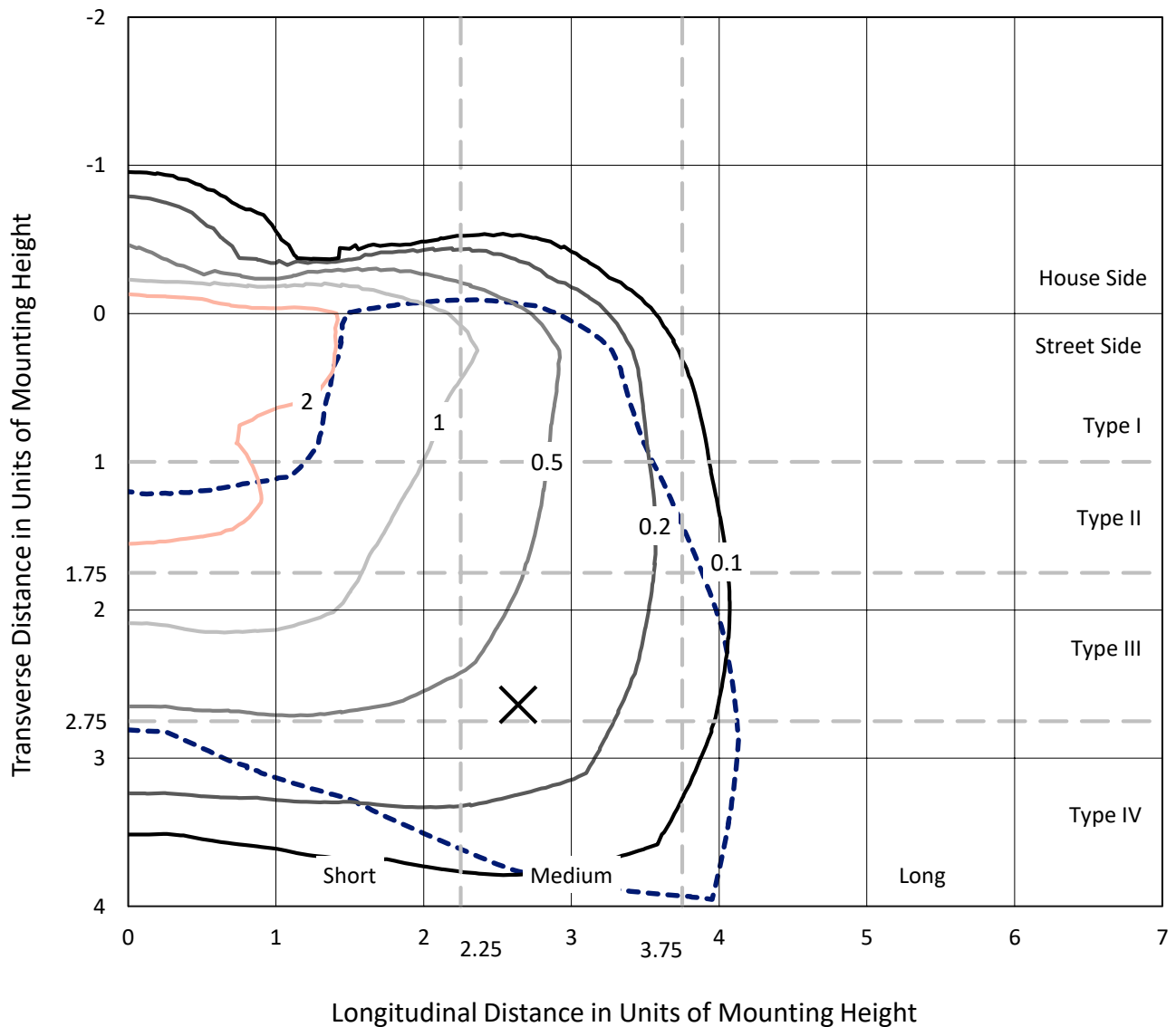


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

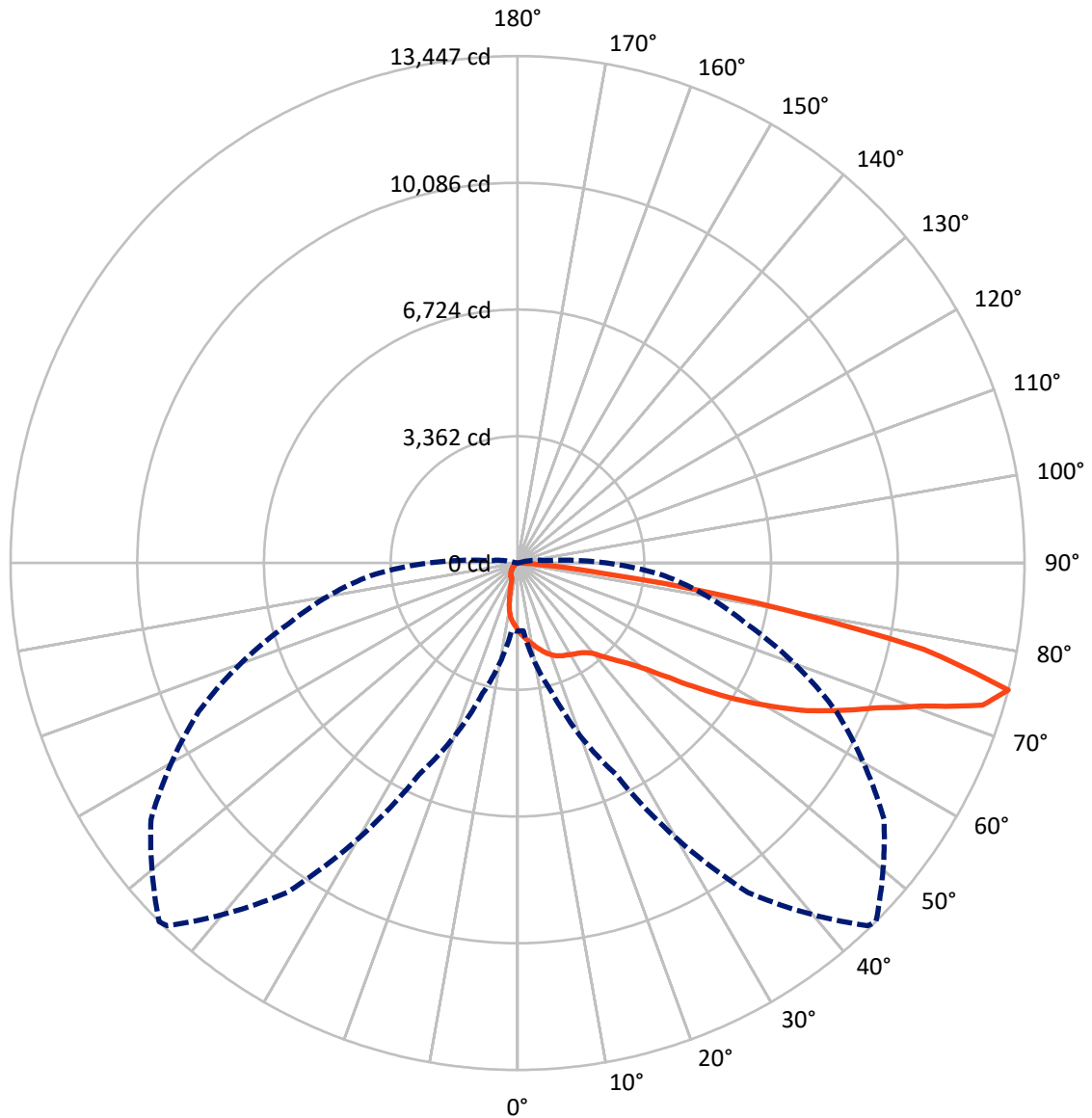


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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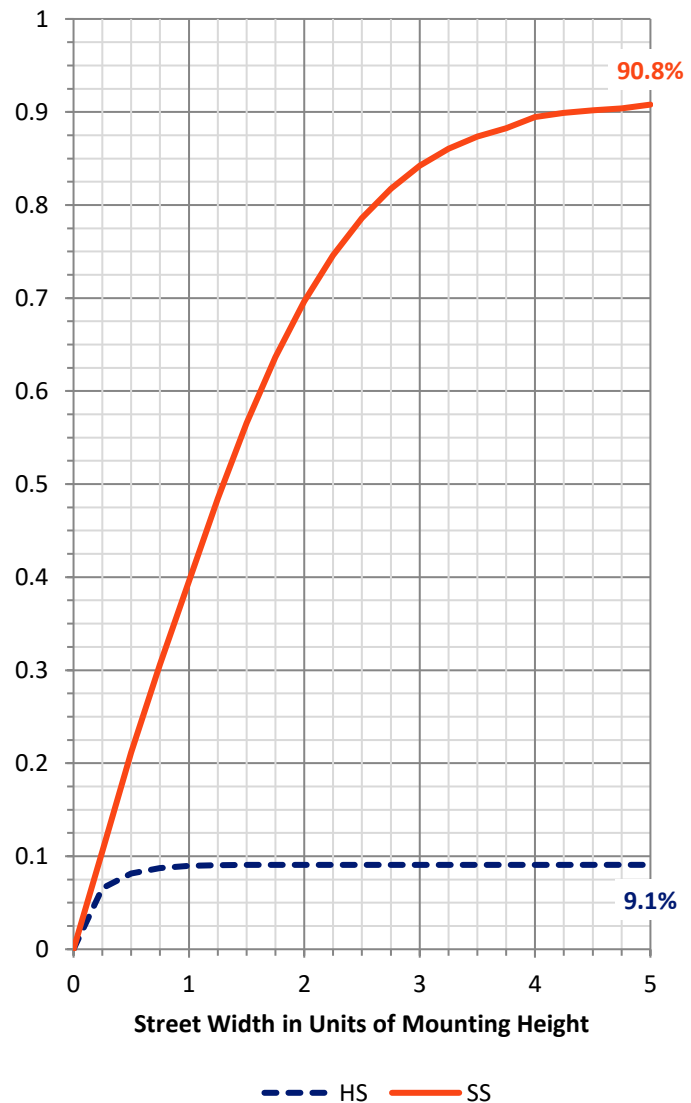
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1529.8	0.0	1529.8
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	15194.7	0.0	15194.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	16724.5	0.0	16724.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.0
10°-20°	478.3	2.9
20°-30°	792.1	4.7
30°-40°	1146.3	6.9
40°-50°	1877.1	11.2
50°-60°	3344.5	20.0
60°-70°	4916.9	29.4
70°-80°	3709.4	22.2
80°-90°	291.0	1.7
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°	16724.5	100.0
0°-180°	16724.5	100.0



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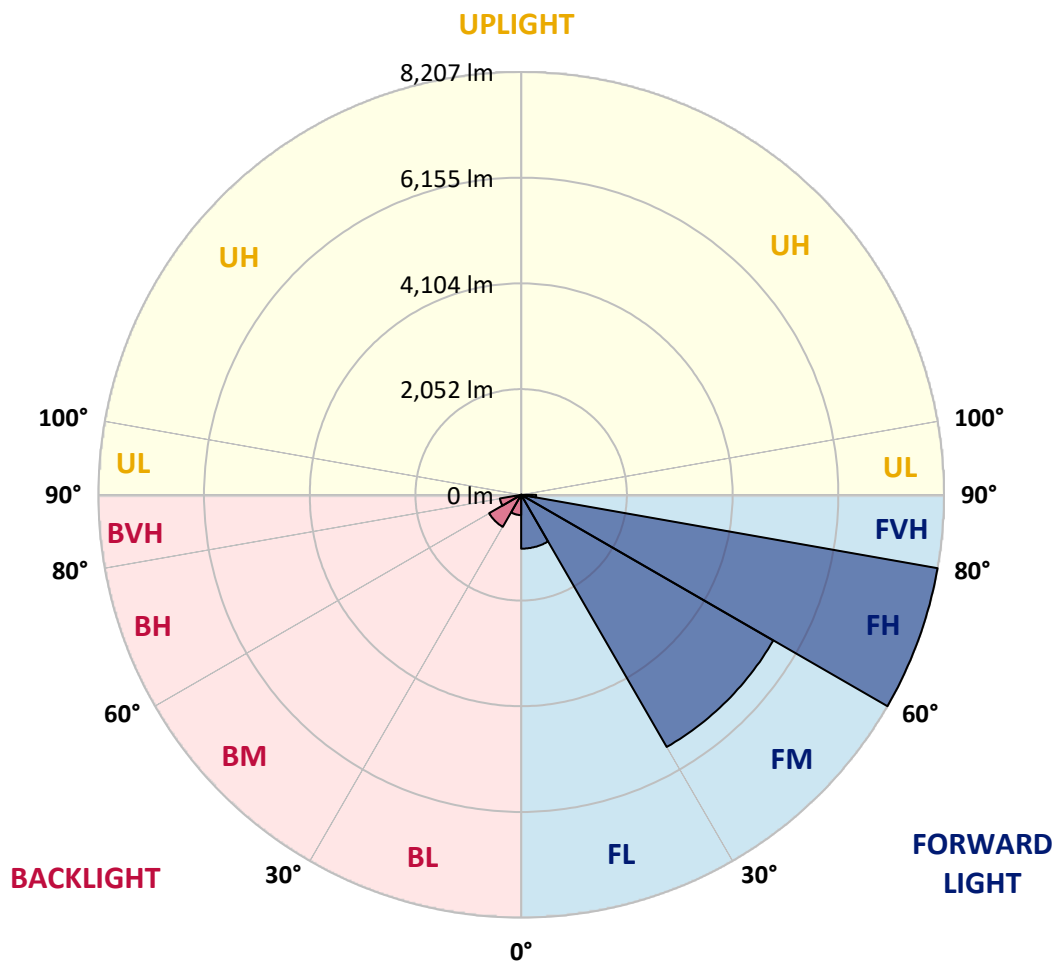
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1046.1	6.3			
FM	(30°-60°)	5651.1	33.8			
FH	(60°-80°)	8207.3	49.1			G4/12000
FVH	(80°-90°)	290.2	1.7			G3/500
BL	(0°-30°)	393.1	2.4	B1/500		
BM	(30°-60°)	716.9	4.3	B1/1000		
BH	(60°-80°)	419.0	2.5	B1/500		G1/500
BVH	(80°-90°)	0.8	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7
2.5°	1943.2	1943.2	1939.1	1935.2	1915.4	1895.7	1891.7	1879.9	1844.2	1820.4	1796.7
5°	2105.4	2109.3	2101.4	2081.6	2038.1	1994.5	1990.6	1958.9	1891.7	1844.2	1792.7
7.5°	2259.6	2267.6	2247.7	2212.3	2160.8	2097.5	2093.5	2034.1	1947.0	1879.9	1804.5
10°	2390.3	2390.3	2362.6	2319.1	2263.6	2196.4	2188.5	2121.2	2022.3	1939.1	1840.2
12.5°	2532.9	2528.8	2489.3	2429.8	2366.6	2303.3	2299.3	2216.2	2121.2	2014.4	1891.7
15°	2663.4	2655.5	2603.9	2548.6	2481.3	2414.0	2410.2	2327.0	2228.1	2101.4	1966.8
17.5°	2734.6	2730.7	2683.1	2627.7	2572.3	2521.0	2517.0	2429.8	2323.0	2192.5	2042.0
20°	2746.5	2750.4	2710.8	2663.4	2631.8	2603.9	2603.9	2524.9	2410.2	2271.5	2121.2
22.5°	2750.4	2762.3	2734.6	2671.3	2663.4	2667.3	2675.2	2611.9	2493.2	2362.6	2204.4
25°	2778.2	2794.0	2774.1	2699.0	2691.1	2718.8	2726.6	2699.0	2592.1	2461.5	2299.3
27.5°	2833.6	2849.3	2833.6	2738.6	2726.6	2754.5	2762.3	2778.2	2699.0	2556.5	2398.3
30°	2944.4	2948.2	2912.7	2794.0	2770.3	2805.9	2817.8	2861.2	2798.0	2647.6	2493.2
32.5°	3138.3	3098.8	2991.9	2833.6	2813.8	2853.3	2865.2	2912.7	2888.9	2734.6	2592.1
35°	3534.0	3328.2	3082.9	2888.9	2869.1	2908.7	2924.5	2991.9	3003.8	2857.2	2714.8
37.5°	3530.1	3344.0	3296.6	2995.8	2968.1	2995.8	3015.6	3098.8	3146.1	3019.6	2892.9
40°	3779.3	3700.2	3700.2	3197.6	3106.6	3146.1	3165.9	3249.1	3332.2	3233.2	3102.7
42.5°	4562.9	4511.5	4456.1	3585.4	3300.6	3411.4	3423.3	3474.6	3573.5	3541.9	3387.6
45°	5437.5	5390.1	5176.4	4242.3	3632.9	3652.8	3680.4	3763.5	3906.0	3965.4	3783.3
47.5°	6122.2	6074.7	5892.6	5033.9	4151.3	3977.2	3977.2	4139.5	4361.1	4511.5	4337.3
50°	6672.3	6616.8	6506.1	5876.8	5002.2	4444.3	4420.5	4610.5	4938.9	5172.4	5053.7
52.5°	7206.6	7044.2	6977.0	6747.4	5963.8	5121.0	5057.6	5192.2	5647.3	5936.2	5837.2
55°	7562.7	7538.9	7467.7	7546.9	6973.1	5944.2	5888.7	5916.3	6486.3	6680.2	6557.4
57.5°	7895.2	7891.3	8049.4	8417.5	8073.2	6886.0	6798.9	6755.3	7297.6	7250.1	7356.8
60°	8306.6	8235.5	8603.4	9129.8	9082.4	7804.0	7705.1	7618.0	7918.9	7784.4	8314.6
62.5°	8326.5	8306.6	9054.6	9810.5	10083.7	8738.1	8623.3	8310.7	8461.0	8306.6	9228.7
65°	7570.6	7669.5	9244.5	10170.7	10922.6	9557.2	9418.8	8931.9	8943.9	8840.9	10305.3
67.5°	7400.4	7451.9	8722.3	10558.5	11528.0	10384.3	10253.8	9648.2	9505.9	9513.7	10942.3
70°	6977.0	7056.1	8073.2	10530.8	12006.9	11488.6	11357.9	10701.0	10356.6	9972.9	10451.6
72.5°	5330.7	5465.3	6802.9	9232.7	11876.3	12933.0	12897.3	12034.7	10696.9	9157.5	7907.1
75°	1804.5	1800.7	3573.5	6201.3	10669.3	13376.2	13447.4	11868.3	9331.7	6316.2	3925.9
77.5°	387.8	391.8	736.2	2513.0	7087.7	10740.6	11013.6	8951.8	6019.4	2813.8	898.3
80°	189.9	193.9	304.7	664.8	2833.6	6023.2	6450.6	4602.6	2224.2	562.0	150.3
82.5°	95.0	99.0	158.3	352.2	1048.7	2141.0	2287.4	1693.8	637.2	316.7	75.2
85°	35.7	35.7	79.1	209.8	478.8	502.6	617.3	490.7	383.8	257.3	19.9
87.5°	7.9	7.9	43.6	102.9	213.6	158.3	158.3	150.3	233.5	174.1	7.9
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°	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7	1788.7
2.5°	1784.8	1769.0	1741.3	1713.5	1693.8	1670.0	1658.2	1646.4	1642.3	1638.4	1646.4
5°	1765.0	1741.3	1689.8	1646.4	1606.7	1575.1	1551.4	1527.6	1515.7	1507.7	1511.8
7.5°	1765.0	1729.3	1654.1	1586.9	1523.6	1456.3	1389.0	1337.7	1298.1	1274.2	1278.3
10°	1784.8	1737.3	1638.4	1547.4	1428.7	1286.2	1139.8	1029.0	953.7	910.3	910.3
12.5°	1828.3	1765.0	1642.3	1499.9	1298.1	1048.7	827.1	692.6	637.2	605.5	609.4
15°	1887.7	1812.5	1662.1	1436.6	1116.1	779.5	577.8	490.7	490.7	498.6	502.6
17.5°	1955.0	1871.9	1677.9	1341.6	882.6	557.9	455.1	447.1	459.0	478.8	478.8
20°	2022.3	1931.3	1685.8	1191.2	661.0	443.3	431.4	431.4	439.4	459.0	463.0
22.5°	2105.4	2006.5	1677.9	1005.3	494.6	419.5	415.6	415.6	415.6	439.4	439.4
25°	2192.5	2093.5	1646.4	807.3	419.5	403.7	399.7	395.8	395.8	415.6	419.5
27.5°	2291.3	2184.5	1571.1	617.3	395.8	387.8	383.8	376.0	376.0	391.8	391.8
30°	2390.3	2287.4	1456.3	466.9	376.0	372.0	364.2	356.2	348.3	364.2	364.2
32.5°	2497.2	2394.3	1306.0	372.0	348.3	348.3	344.3	332.5	324.5	332.5	336.3
35°	2639.6	2517.0	1135.7	324.5	312.6	312.6	312.6	308.7	292.8	300.8	300.8
37.5°	2829.7	2687.1	937.9	300.8	284.9	276.9	276.9	276.9	265.2	269.1	269.1
40°	3070.9	2884.9	748.0	281.0	265.2	245.3	237.4	241.5	233.5	233.5	229.5
42.5°	3399.5	3098.8	562.0	265.2	249.3	221.6	205.8	201.8	193.9	189.9	189.9
45°	3870.3	3359.9	403.7	249.3	237.4	193.9	178.0	166.1	146.5	134.6	134.6
47.5°	4479.8	3656.7	300.8	233.5	225.6	170.1	150.3	126.7	99.0	91.0	91.0
50°	5223.9	3989.2	253.3	209.8	205.8	150.3	118.8	83.2	55.3	47.5	51.5
52.5°	5948.0	4301.8	225.6	185.9	182.0	130.7	87.0	43.6	23.7	23.7	23.7
55°	6557.4	4523.3	205.8	166.1	158.3	102.9	47.5	19.9	11.9	11.9	11.9
57.5°	7107.6	4649.9	185.9	146.5	126.7	71.2	19.9	7.9	7.9	4.0	4.0
60°	7610.3	4725.3	162.2	126.7	99.0	39.5	7.9	4.0	4.0	0.0	0.0
62.5°	8104.9	4780.6	138.5	102.9	75.2	15.8	4.0	4.0	0.0	0.0	0.0
65°	8480.8	4760.7	110.9	83.2	47.5	7.9	4.0	0.0	0.0	0.0	0.0
67.5°	8469.0	4491.7	83.2	63.3	23.7	4.0	0.0	0.0	0.0	0.0	0.0
70°	7574.6	3783.3	55.3	39.5	7.9	4.0	0.0	0.0	0.0	0.0	0.0
72.5°	5374.2	2426.0	35.7	23.7	4.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2366.6	736.2	19.9	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	463.0	170.1	11.9	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	110.9	19.9	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.5	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)