

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: P265714

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265714
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-AF72-240-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1030mA 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: 17289.8 lumens
Efficiency: N/A
Efficacy: 71.4 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): 242
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

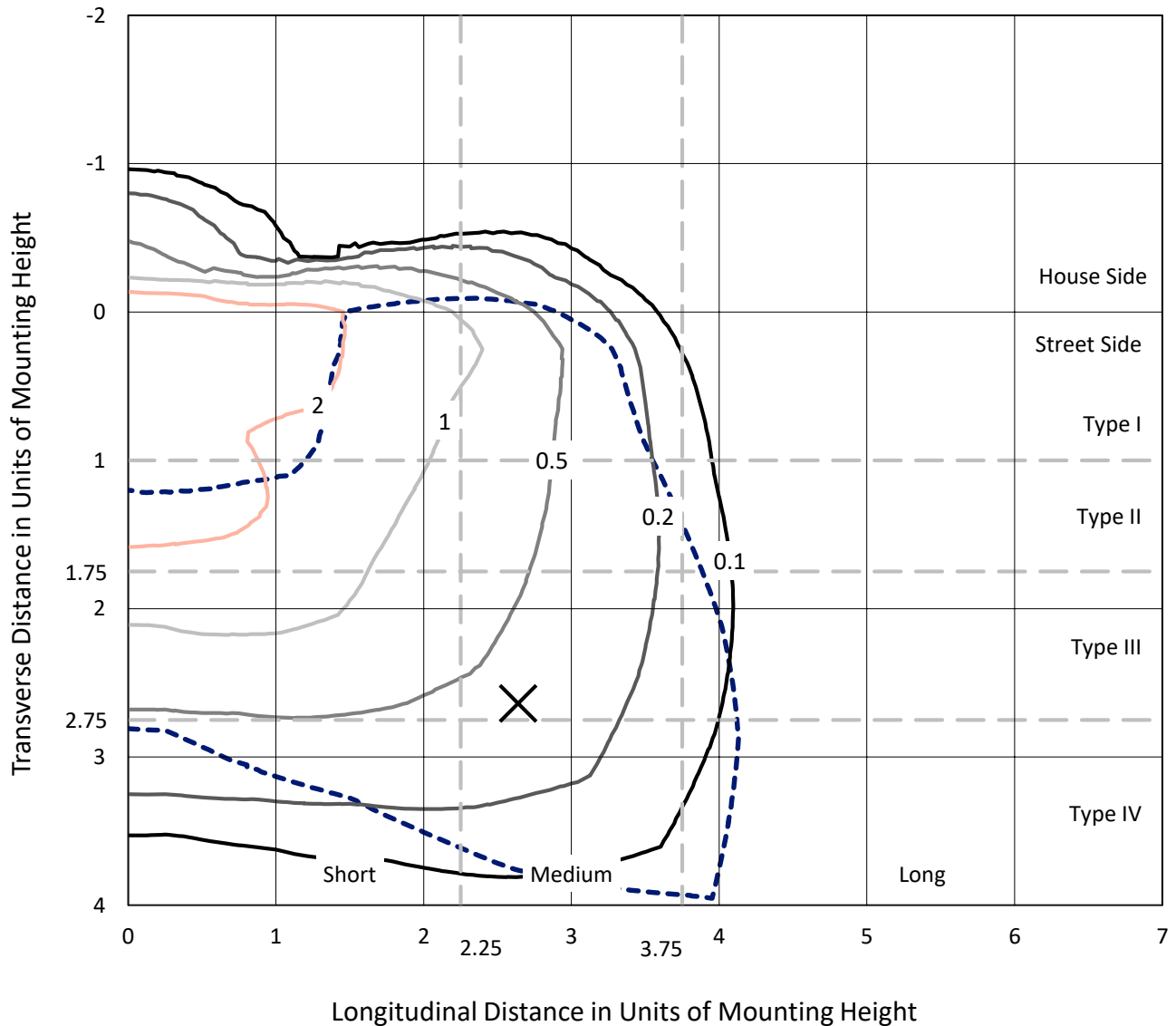


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

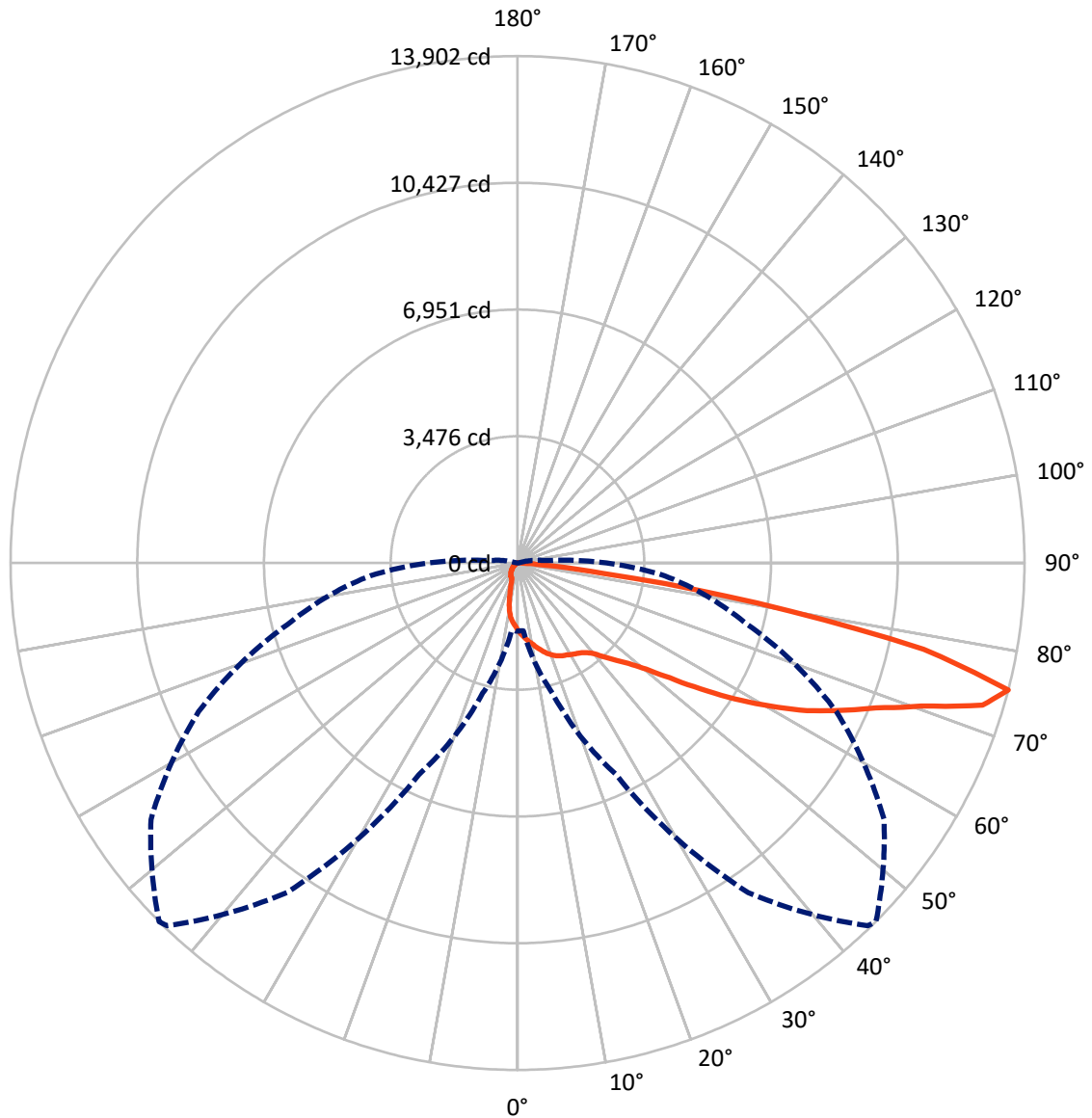


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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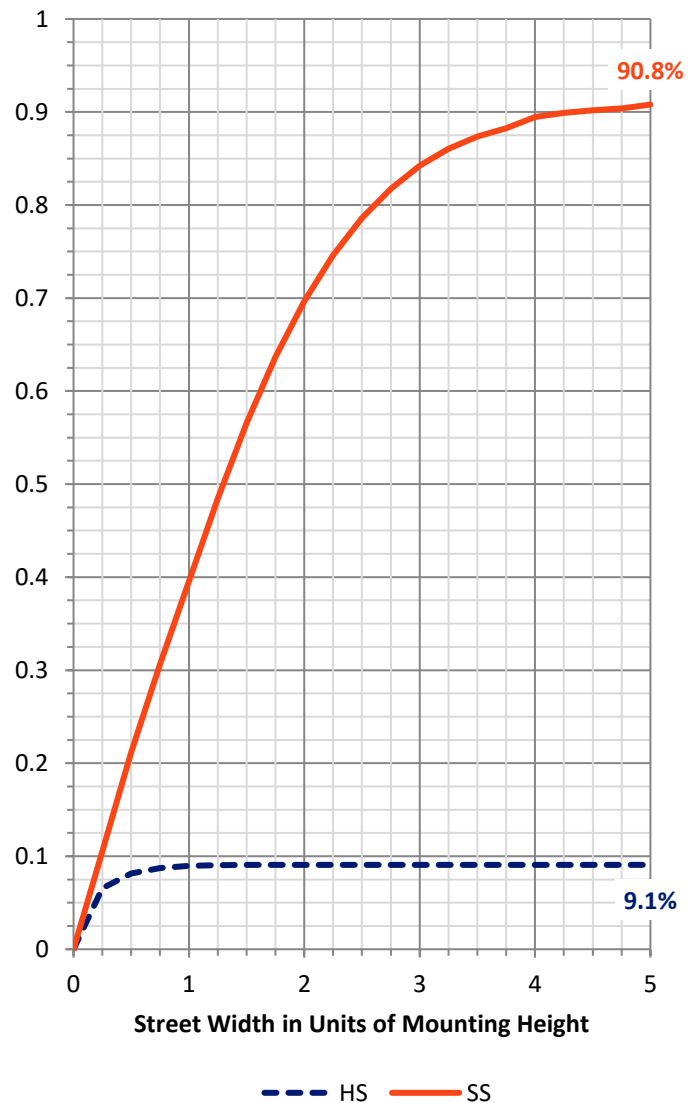
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1581.5	0.0	1581.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	15708.3	0.0	15708.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	17289.8	0.0	17289.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.5	1.0
10°-20°	494.4	2.9
20°-30°	818.9	4.7
30°-40°	1185.1	6.9
40°-50°	1940.5	11.2
50°-60°	3457.6	20.0
60°-70°	5083.1	29.4
70°-80°	3834.7	22.2
80°-90°	300.9	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°	17289.8	100.0
0°-180°	17289.8	100.0



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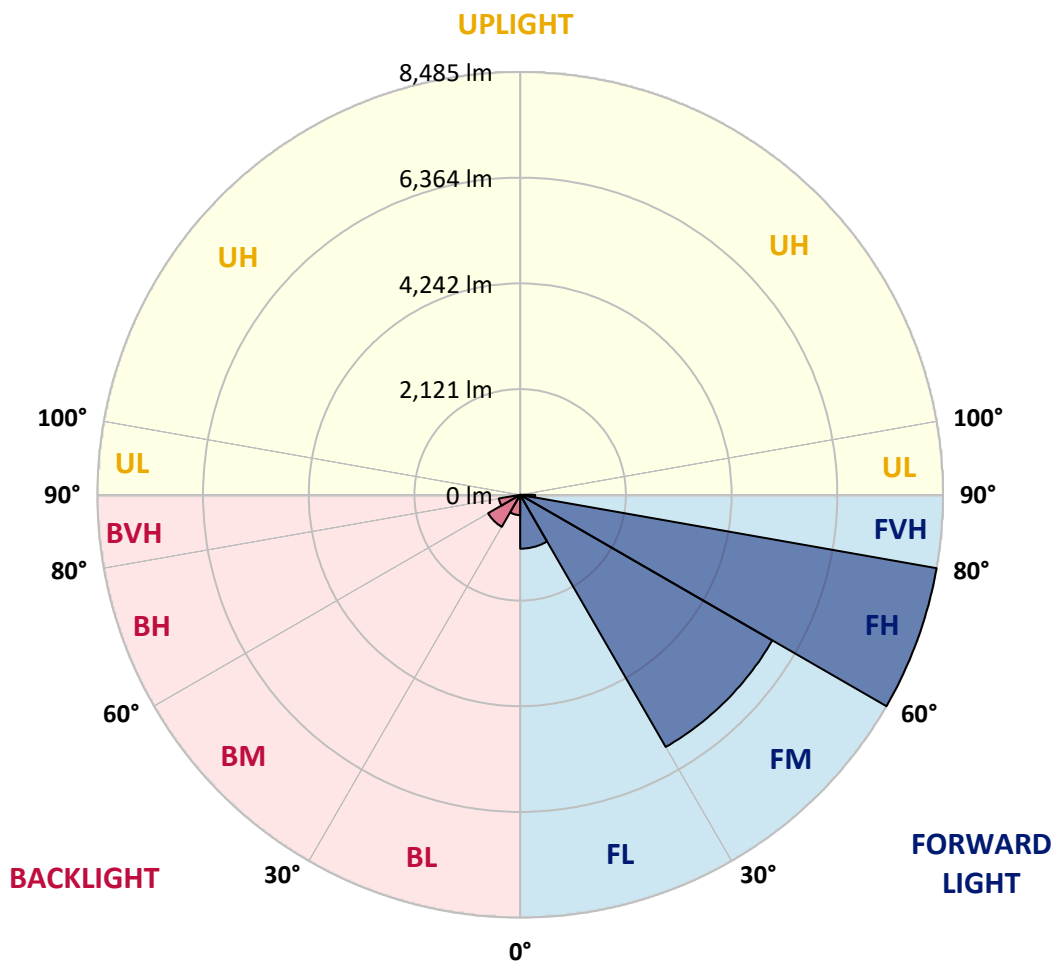
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1081.4	6.3			
FM	(30°-60°)	5842.1	33.8			
FH	(60°-80°)	8484.7	49.1			G4/12000
FVH	(80°-90°)	300.0	1.7			G3/500
BL	(0°-30°)	406.4	2.4	B1/500		
BM	(30°-60°)	741.1	4.3	B1/1000		
BH	(60°-80°)	433.2	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°	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3
2.5°	2008.8	2008.8	2004.7	2000.6	1980.1	1959.7	1955.6	1943.4	1906.6	1881.9	1857.4
5°	2176.6	2180.6	2172.5	2152.0	2107.0	2062.0	2057.8	2025.1	1955.6	1906.6	1853.4
7.5°	2336.1	2344.2	2323.8	2286.9	2233.8	2168.4	2164.2	2102.9	2012.9	1943.4	1865.6
10°	2471.1	2471.1	2442.4	2397.4	2340.2	2270.6	2262.4	2192.9	2090.6	2004.7	1902.4
12.5°	2618.4	2614.2	2573.4	2512.0	2446.5	2381.0	2377.1	2291.0	2192.9	2082.5	1955.6
15°	2753.3	2745.2	2692.0	2634.8	2565.2	2495.6	2491.5	2405.7	2303.3	2172.5	2033.4
17.5°	2827.1	2823.0	2773.8	2716.6	2659.3	2606.2	2602.0	2512.0	2401.6	2266.6	2111.0
20°	2839.4	2843.4	2802.5	2753.3	2720.6	2692.0	2692.0	2610.3	2491.5	2348.3	2192.9
22.5°	2843.4	2855.7	2827.1	2761.6	2753.3	2757.4	2765.7	2700.2	2577.4	2442.4	2278.8
25°	2872.1	2888.4	2868.0	2790.2	2782.1	2810.6	2818.8	2790.2	2679.7	2544.8	2377.1
27.5°	2929.4	2945.7	2929.4	2831.1	2818.8	2847.4	2855.7	2872.1	2790.2	2643.0	2479.3
30°	3043.8	3047.9	3011.2	2888.4	2863.8	2900.6	2912.9	2957.9	2892.5	2737.0	2577.4
32.5°	3244.4	3203.4	3093.0	2929.4	2908.8	2949.8	2962.0	3011.2	2986.5	2827.1	2679.7
35°	3653.4	3440.7	3187.0	2986.5	2966.2	3007.0	3023.4	3093.0	3105.3	2953.8	2806.6
37.5°	3649.4	3457.0	3408.0	3097.0	3068.4	3097.0	3117.5	3203.4	3252.6	3121.6	2990.6
40°	3907.1	3825.3	3825.3	3305.8	3211.6	3252.6	3273.0	3358.9	3444.8	3342.6	3207.5
42.5°	4717.2	4664.0	4606.7	3706.6	3412.1	3526.7	3539.0	3592.1	3694.4	3661.6	3502.1
45°	5621.4	5572.2	5351.4	4385.7	3755.8	3776.3	3804.9	3890.7	4038.1	4099.4	3911.2
47.5°	6329.1	6280.1	6091.9	5204.1	4291.7	4111.7	4111.7	4279.4	4508.6	4664.0	4484.0
50°	6897.8	6840.6	6726.0	6075.4	5171.4	4594.4	4569.9	4766.2	5105.8	5347.3	5224.5
52.5°	7450.2	7282.4	7212.9	6975.6	6165.4	5294.0	5228.6	5367.7	5838.2	6136.9	6034.5
55°	7818.4	7793.8	7720.2	7802.0	7208.8	6145.0	6087.8	6116.4	6705.5	6906.0	6779.1
57.5°	8162.0	8157.9	8321.5	8702.1	8346.2	7118.8	7028.7	6983.8	7544.2	7495.1	7605.6
60°	8587.4	8513.9	8894.3	9438.4	9389.4	8067.9	7965.6	7875.6	8186.6	8047.5	8595.7
62.5°	8608.0	8587.4	9360.7	10142.1	10424.4	9033.4	8914.8	8591.6	8747.1	8587.4	9540.8
65°	7826.6	7928.8	9557.1	10514.4	11291.8	9880.3	9737.1	9233.9	9246.2	9139.9	10653.5
67.5°	7650.5	7703.8	9017.0	10915.3	11917.8	10735.4	10600.4	9974.4	9827.1	9835.4	11312.3
70°	7212.9	7294.6	8346.2	10886.7	12412.8	11876.9	11741.8	11062.6	10706.8	10309.8	10805.0
72.5°	5510.9	5650.0	7032.8	9544.9	12277.8	13370.2	13333.4	12441.4	11058.6	9467.1	8174.2
75°	1865.6	1861.5	3694.4	6410.9	11030.0	13828.4	13902.0	12269.6	9647.1	6529.6	4058.5
77.5°	401.0	405.0	761.0	2597.9	7327.4	11103.6	11385.8	9254.3	6222.7	2908.8	928.7
80°	196.4	200.5	315.0	687.4	2929.4	6226.8	6668.7	4758.1	2299.3	580.9	155.4
82.5°	98.2	102.2	163.6	364.2	1084.2	2213.3	2364.7	1751.1	658.6	327.3	77.8
85°	36.8	36.8	81.8	216.9	495.1	519.6	638.2	507.4	396.8	265.9	20.4
87.5°	8.2	8.2	45.0	106.4	221.0	163.6	163.6	155.4	241.4	180.0	8.2
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°	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3	1849.3
2.5°	1845.2	1828.8	1800.2	1771.5	1751.1	1726.5	1714.2	1702.0	1697.8	1693.8	1702.0
5°	1824.6	1800.2	1746.9	1702.0	1661.1	1628.3	1603.7	1579.2	1567.0	1558.7	1562.8
7.5°	1824.6	1787.8	1710.2	1640.6	1575.1	1505.6	1436.0	1382.9	1341.9	1317.4	1321.4
10°	1845.2	1796.0	1693.8	1599.7	1477.0	1329.6	1178.2	1063.8	986.0	941.0	941.0
12.5°	1890.2	1824.6	1697.8	1550.6	1341.9	1084.2	855.0	715.9	658.6	625.9	630.0
15°	1951.5	1873.8	1718.3	1485.1	1153.8	806.0	597.4	507.4	507.4	515.4	519.6
17.5°	2021.0	1935.2	1734.6	1387.0	912.4	576.8	470.5	462.3	474.6	495.1	495.1
20°	2090.6	1996.6	1742.8	1231.4	683.3	458.2	446.0	446.0	454.2	474.6	478.6
22.5°	2176.6	2074.2	1734.6	1039.2	511.5	433.7	429.6	429.6	429.6	454.2	454.2
25°	2266.6	2164.2	1702.0	834.6	433.7	417.4	413.2	409.1	409.1	429.6	433.7
27.5°	2368.8	2258.3	1624.2	638.2	409.1	401.0	396.8	388.6	388.6	405.0	405.0
30°	2471.1	2364.7	1505.6	482.7	388.6	384.6	376.4	368.2	360.0	376.4	376.4
32.5°	2581.5	2475.2	1350.2	384.6	360.0	360.0	356.0	343.6	335.4	343.6	347.7
35°	2728.8	2602.0	1174.2	335.4	323.2	323.2	323.2	319.1	302.8	311.0	311.0
37.5°	2925.2	2778.0	969.6	311.0	294.6	286.4	286.4	286.4	274.2	278.3	278.3
40°	3174.8	2982.6	773.3	290.5	274.2	253.6	245.4	249.5	241.4	241.4	237.3
42.5°	3514.3	3203.4	580.9	274.2	257.8	229.1	212.8	208.6	200.5	196.4	196.4
45°	4001.2	3473.4	417.4	257.8	245.4	200.5	184.2	171.8	151.4	139.1	139.1
47.5°	4631.3	3780.2	311.0	241.4	233.2	175.9	155.4	131.0	102.2	94.1	94.1
50°	5400.4	4123.9	261.9	216.9	212.8	155.4	122.8	85.9	57.3	49.0	53.2
52.5°	6149.1	4447.1	233.2	192.2	188.1	135.0	90.0	45.0	24.6	24.6	24.6
55°	6779.1	4676.2	212.8	171.8	163.6	106.4	49.0	20.4	12.2	12.2	12.2
57.5°	7347.9	4807.2	192.2	151.4	131.0	73.7	20.4	8.2	8.2	4.1	4.1
60°	7867.4	4885.0	167.8	131.0	102.2	41.0	8.2	4.1	4.1	0.0	0.0
62.5°	8378.9	4942.3	143.2	106.4	77.8	16.3	4.1	4.1	0.0	0.0	0.0
65°	8767.5	4921.8	114.5	85.9	49.0	8.2	4.1	0.0	0.0	0.0	0.0
67.5°	8755.2	4643.6	85.9	65.4	24.6	4.1	0.0	0.0	0.0	0.0	0.0
70°	7830.6	3911.2	57.3	41.0	8.2	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	5555.8	2507.9	36.8	24.6	4.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	2446.5	761.0	20.4	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	478.6	175.9	12.2	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	114.5	20.4	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	49.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	4.1	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)