

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: P237458

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237458
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-AF72-250-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA 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: 20825.2 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G4

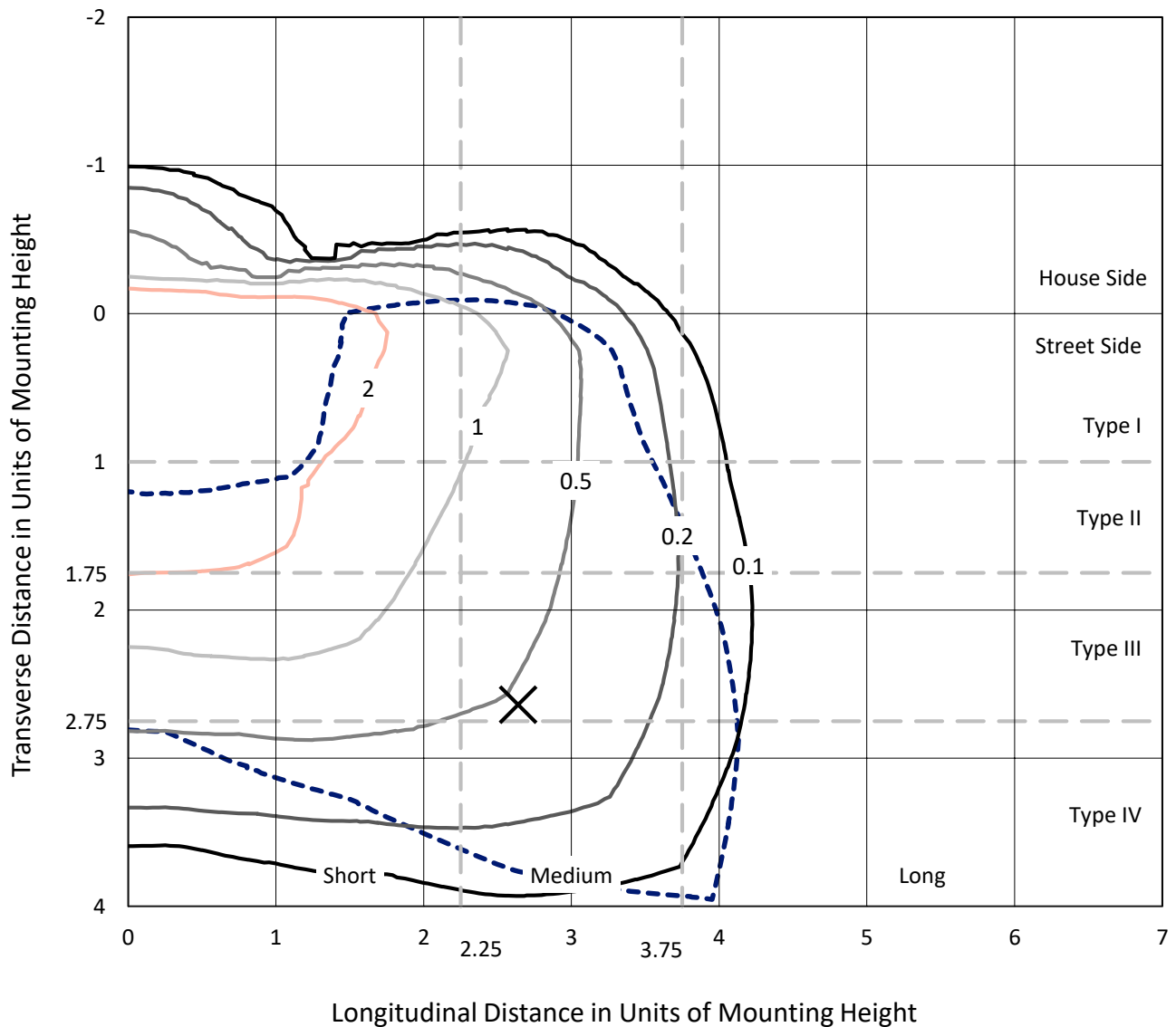
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

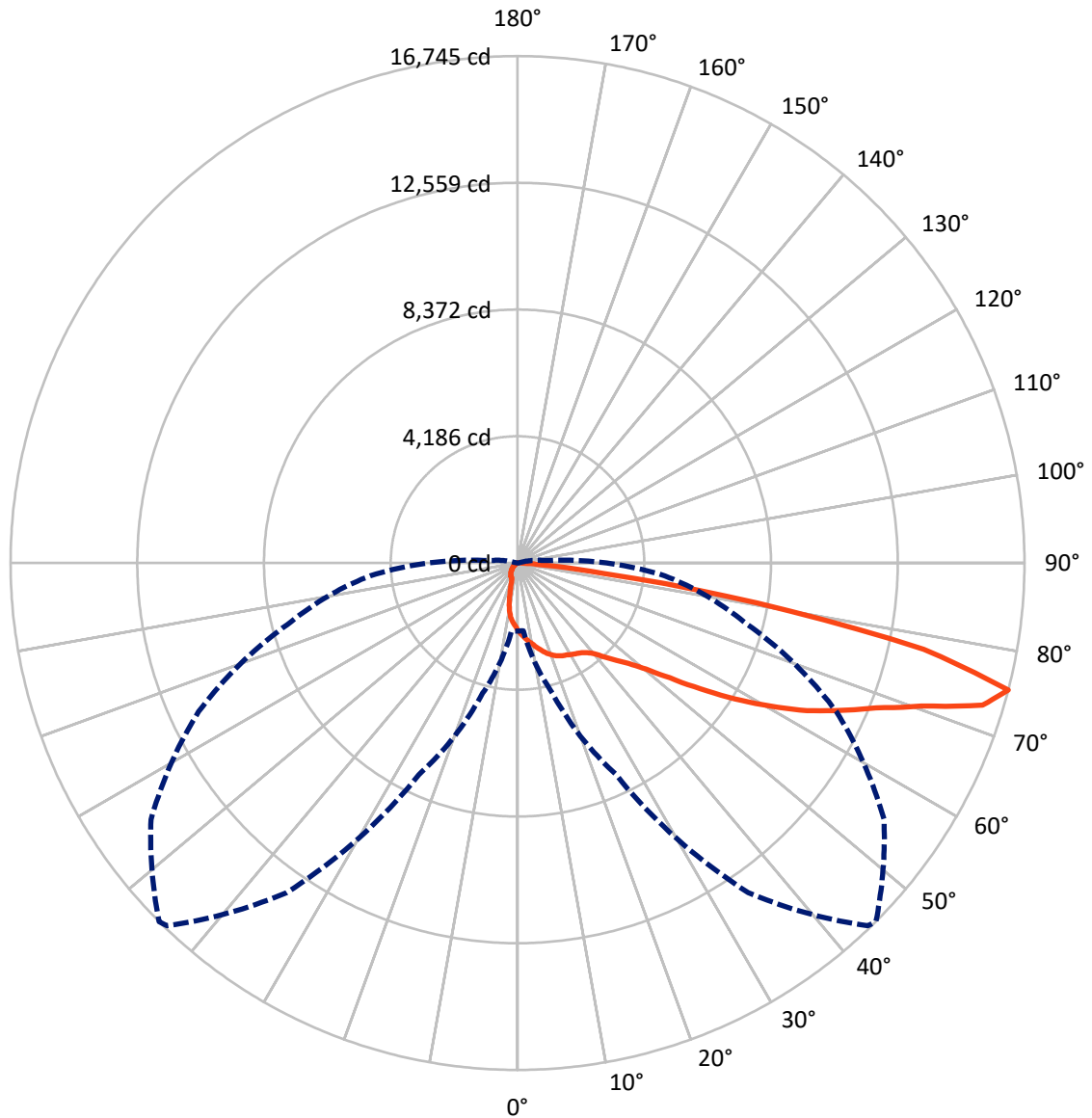
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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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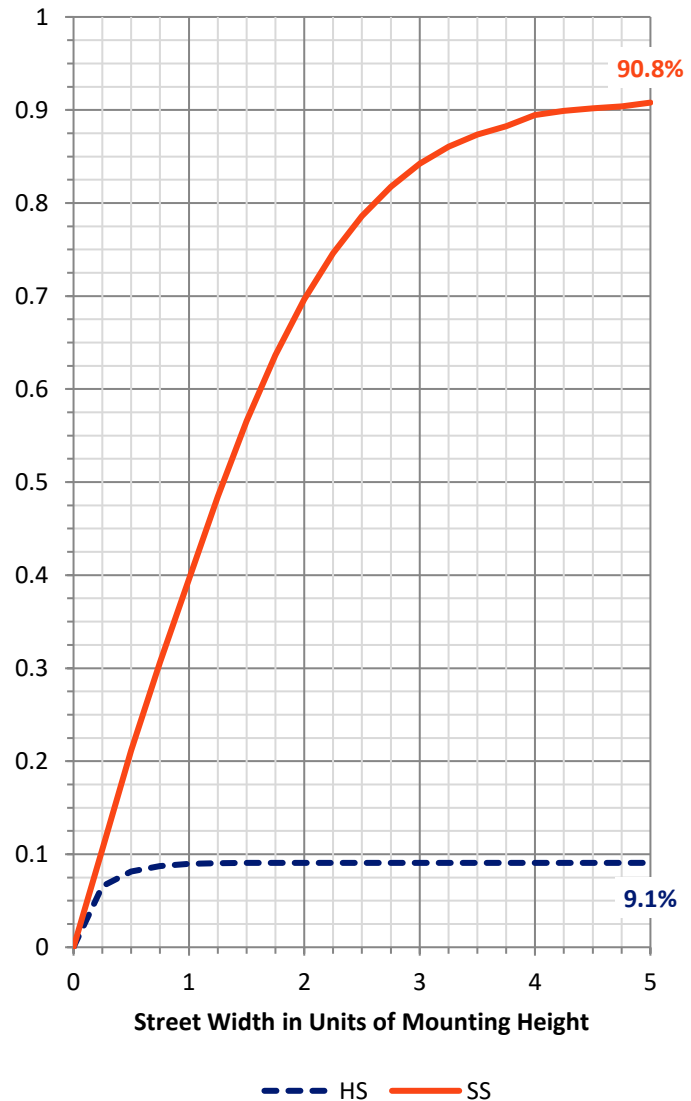
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1904.9	0.0	1904.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	18920.4	0.0	18920.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	20825.2	0.0	20825.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.2	1.0
10°-20°	595.5	2.9
20°-30°	986.3	4.7
30°-40°	1427.4	6.9
40°-50°	2337.3	11.2
50°-60°	4164.6	20.0
60°-70°	6122.5	29.4
70°-80°	4618.9	22.2
80°-90°	362.4	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°	20825.2	100.0
0°-180°	20825.2	100.0



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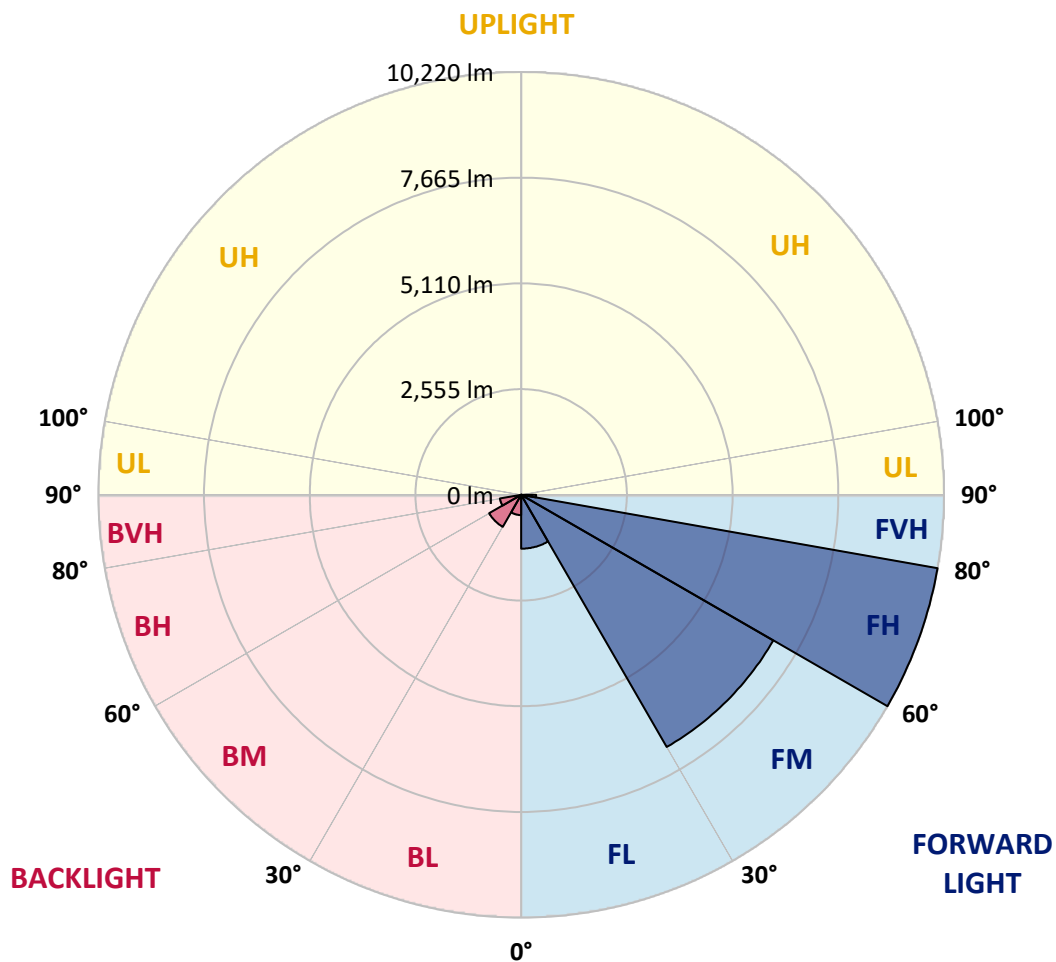
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1302.6	6.3			
FM	(30°-60°)	7036.7	33.8			
FH	(60°-80°)	10219.7	49.1			G4/12000
FVH	(80°-90°)	361.4	1.7			G3/500
BL	(0°-30°)	489.5	2.4	B1/500		
BM	(30°-60°)	892.6	4.3	B1/1000		
BH	(60°-80°)	521.7	2.5	B2/1000		G2/1000
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4
2.5°	2419.6	2419.6	2414.7	2409.7	2385.1	2360.5	2355.4	2340.7	2296.3	2266.8	2237.2
5°	2621.6	2626.5	2616.7	2592.1	2537.8	2483.6	2478.7	2439.2	2355.4	2296.3	2232.3
7.5°	2813.8	2823.7	2799.0	2754.6	2690.6	2611.7	2606.8	2532.9	2424.5	2340.7	2247.1
10°	2976.4	2976.4	2941.9	2887.7	2818.7	2735.0	2725.0	2641.3	2518.1	2414.7	2291.4
12.5°	3153.8	3148.8	3099.6	3025.7	2946.8	2867.9	2863.0	2759.6	2641.3	2508.3	2355.4
15°	3316.4	3306.6	3242.5	3173.5	3089.7	3005.9	3001.0	2897.5	2774.3	2616.7	2449.1
17.5°	3405.1	3400.2	3341.1	3272.1	3203.1	3139.0	3134.1	3025.7	2892.6	2730.1	2542.7
20°	3419.9	3424.8	3375.5	3316.4	3277.0	3242.5	3242.5	3143.9	3001.0	2828.6	2641.3
22.5°	3424.8	3439.6	3405.1	3326.2	3316.4	3321.3	3331.2	3252.4	3104.6	2941.9	2744.8
25°	3459.3	3479.1	3454.4	3360.8	3350.9	3385.5	3395.3	3360.8	3227.7	3065.1	2863.0
27.5°	3528.4	3548.0	3528.4	3410.0	3395.3	3429.7	3439.6	3459.3	3360.8	3183.3	2986.3
30°	3666.3	3671.3	3626.9	3479.1	3449.5	3493.8	3508.6	3562.8	3484.0	3296.7	3104.6
32.5°	3907.8	3858.5	3725.4	3528.4	3503.7	3552.9	3567.7	3626.9	3597.3	3405.1	3227.7
35°	4400.5	4144.3	3838.7	3597.3	3572.7	3622.0	3641.7	3725.4	3740.2	3557.9	3380.4
37.5°	4395.6	4164.0	4104.9	3730.4	3695.8	3730.4	3754.9	3858.5	3917.6	3760.0	3602.2
40°	4706.1	4607.5	4607.5	3981.6	3868.3	3917.6	3942.2	4045.8	4149.2	4026.0	3863.4
42.5°	5681.8	5617.7	5548.7	4464.6	4109.8	4247.8	4262.5	4326.6	4449.8	4410.4	4218.2
45°	6770.8	6711.7	6445.6	5282.6	4523.7	4548.3	4582.8	4686.3	4863.7	4937.7	4711.0
47.5°	7623.3	7564.2	7337.5	6268.1	5169.3	4952.4	4952.4	5154.4	5430.4	5617.7	5400.9
50°	8308.3	8239.3	8101.4	7317.8	6228.7	5534.0	5504.4	5740.9	6149.9	6440.6	6292.8
52.5°	8973.5	8771.5	8687.7	8401.9	7426.2	6376.6	6297.7	6465.3	7032.0	7391.7	7268.5
55°	9417.1	9387.5	9298.8	9397.3	8682.8	7401.6	7332.6	7367.1	8076.7	8318.1	8165.4
57.5°	9831.0	9826.1	10023.2	10481.5	10052.7	8574.4	8465.9	8411.8	9086.9	9027.7	9160.8
60°	10343.5	10254.8	10713.1	11368.5	11309.3	9717.6	9594.5	9486.0	9860.5	9693.0	10353.3
62.5°	10368.1	10343.5	11274.9	12216.1	12556.1	10880.6	10737.7	10348.4	10535.7	10343.5	11491.6
65°	9426.9	9550.1	11511.4	12664.4	13600.7	11900.7	11728.2	11122.0	11136.9	11008.7	12832.0
67.5°	9215.0	9279.1	10860.9	13147.4	14354.8	12930.6	12768.0	12014.0	11836.6	11846.5	13625.4
70°	8687.7	8786.3	10052.7	13112.9	14950.9	14305.5	14142.8	13324.9	12896.1	12418.1	13014.4
72.5°	6637.7	6805.3	8471.0	11496.6	14788.4	16104.1	16059.7	14985.5	13319.8	11402.9	9845.8
75°	2247.1	2242.2	4449.8	7721.8	13285.4	16656.0	16744.7	14778.5	11619.8	7864.8	4888.4
77.5°	482.9	487.8	916.6	3129.2	8825.7	13374.1	13714.1	11146.7	7495.2	3503.7	1118.6
80°	236.5	241.4	379.4	827.9	3528.4	7500.2	8032.3	5731.1	2769.4	699.7	187.3
82.5°	118.3	123.2	197.1	438.5	1305.9	2665.9	2848.3	2109.1	793.4	394.2	93.6
85°	44.4	44.4	98.5	261.2	596.3	625.8	768.7	611.0	478.0	320.3	24.7
87.5°	9.8	9.8	54.2	128.1	266.1	197.1	197.1	187.3	290.7	216.9	9.8
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°	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4	2227.4
2.5°	2222.5	2202.7	2168.2	2133.8	2109.1	2079.6	2064.7	2050.0	2045.1	2040.1	2050.0
5°	2197.8	2168.2	2104.2	2050.0	2000.7	1961.3	1931.7	1902.2	1887.3	1877.5	1882.4
7.5°	2197.8	2153.4	2059.8	1976.0	1897.2	1813.4	1729.7	1665.6	1616.4	1586.8	1591.7
10°	2222.5	2163.3	2040.1	1926.7	1778.9	1601.5	1419.2	1281.2	1187.6	1133.4	1133.4
12.5°	2276.7	2197.8	2045.1	1867.6	1616.4	1305.9	1029.9	862.3	793.4	753.9	758.9
15°	2350.5	2256.9	2069.6	1788.8	1389.7	970.8	719.4	611.0	611.0	620.9	625.8
17.5°	2434.3	2330.9	2089.4	1670.5	1098.9	694.8	566.7	556.8	571.6	596.3	596.3
20°	2518.1	2404.8	2099.2	1483.3	823.0	551.9	537.2	537.2	547.0	571.6	576.5
22.5°	2621.6	2498.4	2089.4	1251.7	616.0	522.3	517.4	517.4	517.4	547.0	547.0
25°	2730.1	2606.8	2050.0	1005.3	522.3	502.7	497.7	492.8	492.8	517.4	522.3
27.5°	2853.2	2720.1	1956.3	768.7	492.8	482.9	478.0	468.1	468.1	487.8	487.8
30°	2976.4	2848.3	1813.4	581.4	468.1	463.2	453.4	443.6	433.6	453.4	453.4
32.5°	3109.5	2981.3	1626.2	463.2	433.6	433.6	428.7	413.9	404.1	413.9	418.9
35°	3286.8	3134.1	1414.3	404.1	389.3	389.3	389.3	384.3	364.7	374.5	374.5
37.5°	3523.3	3346.0	1167.9	374.5	354.8	344.9	344.9	344.9	330.2	335.1	335.1
40°	3824.0	3592.4	931.4	349.8	330.2	305.6	295.6	300.6	290.7	290.7	285.8
42.5°	4233.0	3858.5	699.7	330.2	310.5	276.0	256.2	251.3	241.4	236.5	236.5
45°	4819.4	4183.7	502.7	310.5	295.6	241.4	221.8	206.9	182.3	167.6	167.6
47.5°	5578.3	4553.3	374.5	290.7	280.9	211.9	187.3	157.7	123.2	113.3	113.3
50°	6504.7	4967.2	315.4	261.2	256.2	187.3	147.8	103.5	68.9	59.1	64.0
52.5°	7406.5	5356.6	280.9	231.6	226.7	162.6	108.4	54.2	29.6	29.6	29.6
55°	8165.4	5632.5	256.2	206.9	197.1	128.1	59.1	24.7	14.8	14.8	14.8
57.5°	8850.4	5790.2	231.6	182.3	157.7	88.7	24.7	9.8	9.8	4.9	4.9
60°	9476.2	5883.8	202.0	157.7	123.2	49.3	9.8	4.9	4.9	0.0	0.0
62.5°	10092.1	5952.8	172.5	128.1	93.6	19.7	4.9	4.9	0.0	0.0	0.0
65°	10560.3	5928.2	138.0	103.5	59.1	9.8	4.9	0.0	0.0	0.0	0.0
67.5°	10545.5	5593.1	103.5	78.9	29.6	4.9	0.0	0.0	0.0	0.0	0.0
70°	9431.8	4711.0	68.9	49.3	9.8	4.9	0.0	0.0	0.0	0.0	0.0
72.5°	6691.9	3020.8	44.4	29.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2946.8	916.6	24.7	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	576.5	211.9	14.8	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	138.0	24.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	59.1	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	4.9	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)