

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: P237461

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237461
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-AF72-280-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA 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: 22228.7 lumens
Efficiency: N/A
Efficacy: 79.7 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

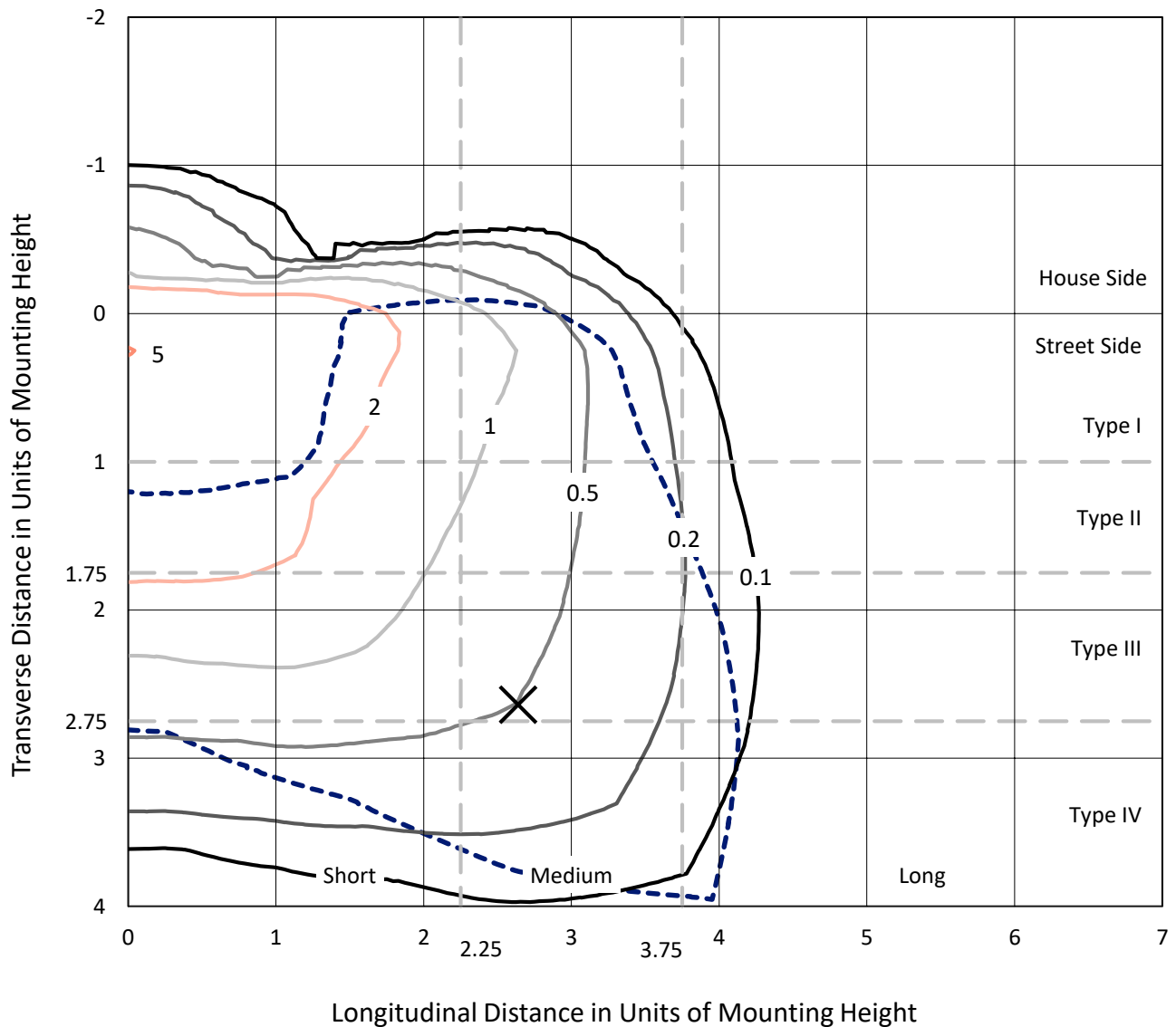
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

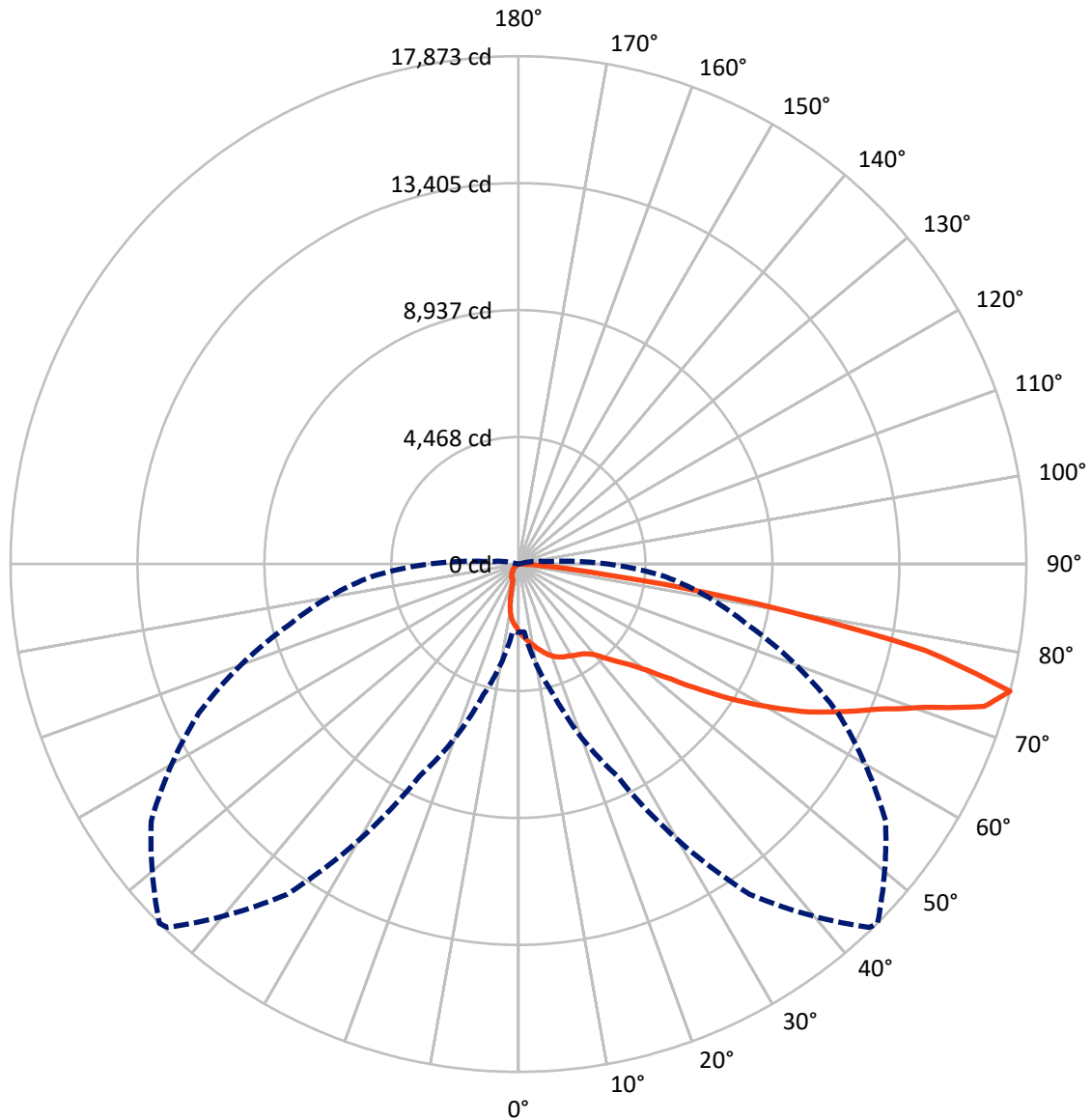


Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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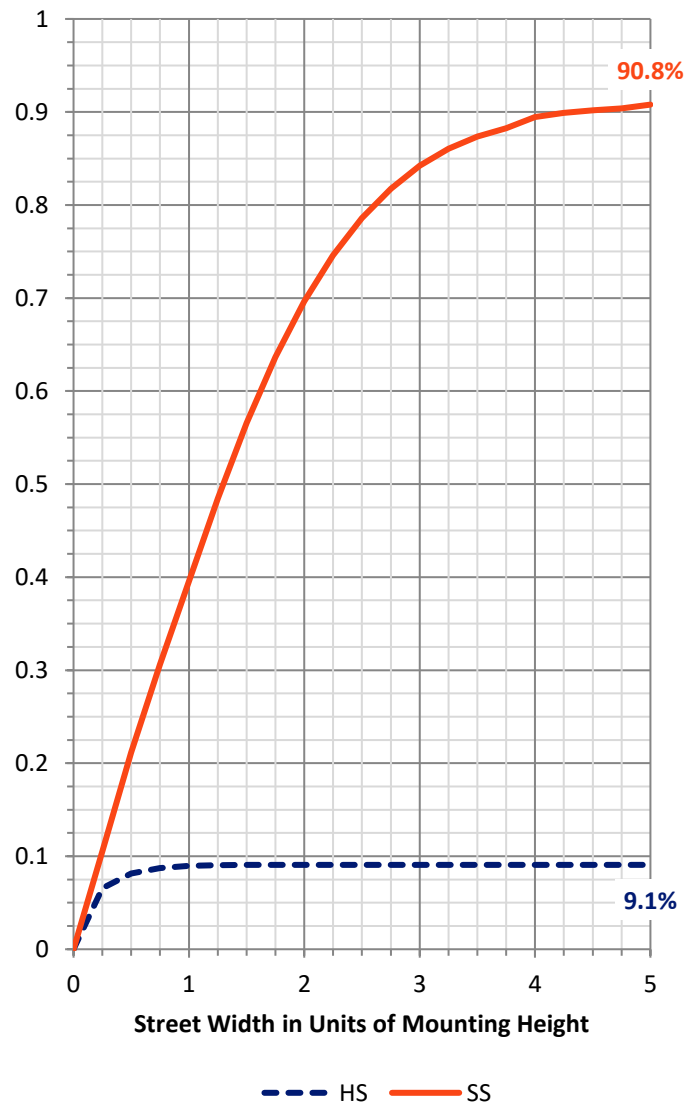
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2033.2	0.0	2033.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	20195.5	0.0	20195.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	22228.7	0.0	22228.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.4	1.0
10°-20°	635.7	2.9
20°-30°	1052.8	4.7
30°-40°	1523.6	6.9
40°-50°	2494.9	11.2
50°-60°	4445.3	20.0
60°-70°	6535.2	29.4
70°-80°	4930.2	22.2
80°-90°	386.8	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°	22228.7	100.0
0°-180°	22228.7	100.0



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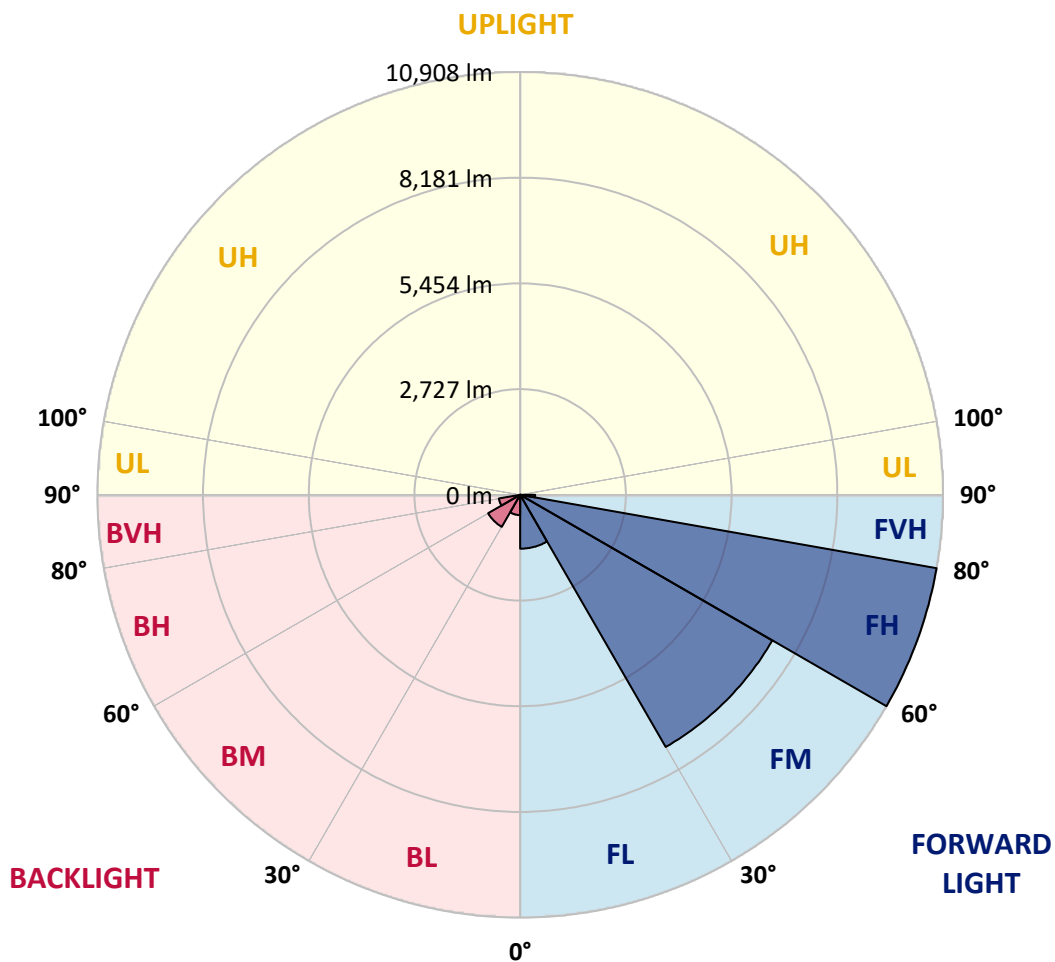
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1390.4	6.3			
FM	(30°-60°)	7510.9	33.8			
FH	(60°-80°)	10908.4	49.1			G4/12000
FVH	(80°-90°)	385.7	1.7			G3/500
BL	(0°-30°)	522.5	2.4	B2/1000		
BM	(30°-60°)	952.8	4.3	B1/1000		
BH	(60°-80°)	556.9	2.5	B2/1000		G2/1000
BVH	(80°-90°)	1.1	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°	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4
2.5°	2582.6	2582.6	2577.3	2572.1	2545.8	2519.5	2514.2	2498.5	2451.1	2419.6	2388.0
5°	2798.3	2803.5	2793.1	2766.7	2708.9	2651.0	2645.8	2603.6	2514.2	2451.1	2382.8
7.5°	3003.4	3013.9	2987.6	2940.3	2871.9	2787.7	2782.5	2703.6	2587.9	2498.5	2398.5
10°	3177.0	3177.0	3140.2	3082.4	3008.7	2919.3	2908.8	2819.4	2687.8	2577.3	2445.9
12.5°	3366.3	3361.1	3308.5	3229.6	3145.5	3061.3	3056.0	2945.6	2819.4	2677.3	2514.2
15°	3539.9	3529.4	3461.1	3387.4	3298.0	3208.6	3203.3	3092.8	2961.3	2793.1	2614.2
17.5°	3634.6	3629.3	3566.2	3492.6	3418.9	3350.6	3345.4	3229.6	3087.6	2914.0	2714.1
20°	3650.4	3655.6	3603.0	3539.9	3497.9	3461.1	3461.1	3355.8	3203.3	3019.2	2819.4
22.5°	3655.6	3671.5	3634.6	3550.5	3539.9	3545.1	3555.7	3471.6	3313.7	3140.2	2929.7
25°	3692.4	3713.5	3687.2	3587.3	3576.7	3613.6	3624.1	3587.3	3445.2	3271.7	3056.0
27.5°	3766.1	3787.2	3766.1	3639.9	3624.1	3660.9	3671.5	3692.4	3587.3	3397.9	3187.5
30°	3913.4	3918.6	3871.3	3713.5	3681.9	3729.3	3745.0	3802.9	3718.7	3518.8	3313.7
32.5°	4171.1	4118.5	3976.5	3766.1	3739.8	3792.4	3808.1	3871.3	3839.7	3634.6	3445.2
35°	4697.1	4423.5	4097.4	3839.7	3813.5	3866.0	3887.1	3976.5	3992.3	3797.7	3608.3
37.5°	4691.9	4444.6	4381.5	3981.7	3944.9	3981.7	4008.0	4118.5	4181.6	4013.3	3845.0
40°	5023.2	4918.0	4918.0	4250.1	4129.0	4181.6	4207.9	4318.4	4428.9	4297.3	4123.8
42.5°	6064.7	5996.3	5922.7	4765.5	4386.7	4534.0	4549.8	4618.2	4749.7	4707.6	4502.5
45°	7227.1	7164.0	6880.0	5638.6	4828.6	4854.9	4891.8	5002.2	5191.6	5270.4	5028.5
47.5°	8137.1	8073.9	7832.0	6690.6	5517.7	5286.2	5286.2	5501.8	5796.4	5996.3	5764.8
50°	8868.3	8794.6	8647.3	7810.9	6648.6	5906.9	5875.3	6127.8	6564.4	6874.7	6716.9
52.5°	9578.3	9362.7	9273.3	8968.1	7926.7	6806.3	6722.2	6901.0	7505.9	7889.9	7758.4
55°	10051.7	10020.1	9925.5	10030.6	9267.9	7900.4	7826.8	7863.5	8621.0	8878.7	8715.6
57.5°	10493.5	10488.3	10698.6	11187.8	10730.2	9152.2	9036.5	8978.6	9699.3	9636.2	9778.2
60°	11040.6	10945.9	11435.1	12134.7	12071.5	10372.5	10241.1	10125.4	10525.1	10346.2	11051.0
62.5°	11066.9	11040.6	12034.7	13039.3	13402.3	11613.9	11461.3	11045.8	11245.7	11040.6	12266.1
65°	10062.3	10193.7	12287.2	13518.0	14517.4	12702.7	12518.6	11871.7	11887.4	11750.6	13696.8
67.5°	9836.1	9904.4	11592.9	14033.5	15322.2	13802.1	13628.5	12823.7	12634.4	12644.8	14543.7
70°	9273.3	9378.4	10730.2	13996.6	15958.5	15269.6	15096.0	14222.8	13765.2	13255.0	13891.5
72.5°	7085.1	7264.0	9041.8	12271.4	15785.1	17189.4	17142.1	15995.4	14217.6	12171.5	10509.3
75°	2398.5	2393.3	4749.7	8242.3	14180.8	17778.5	17873.2	15774.5	12402.9	8394.8	5217.9
77.5°	515.5	520.7	978.4	3340.0	9420.6	14275.4	14638.3	11897.9	8000.3	3739.8	1194.0
80°	252.5	257.8	405.0	883.6	3766.1	8005.6	8573.7	6117.2	2956.1	747.0	199.9
82.5°	126.2	131.4	210.4	468.1	1393.9	2845.6	3040.2	2251.2	846.8	420.8	99.9
85°	47.4	47.4	105.2	278.8	636.5	668.0	820.5	652.2	510.2	341.9	26.3
87.5°	10.5	10.5	57.9	136.8	284.1	210.4	210.4	199.9	310.4	231.4	10.5
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°	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4	2377.4
2.5°	2372.2	2351.2	2314.3	2277.5	2251.2	2219.7	2203.9	2188.1	2182.9	2177.6	2188.1
5°	2345.9	2314.3	2246.0	2188.1	2135.5	2093.5	2061.9	2030.4	2014.5	2004.1	2009.3
7.5°	2345.9	2298.6	2198.6	2109.2	2025.0	1935.6	1846.2	1777.9	1725.2	1693.7	1698.9
10°	2372.2	2309.1	2177.6	2056.6	1898.8	1709.5	1514.9	1367.6	1267.6	1209.7	1209.7
12.5°	2430.1	2345.9	2182.9	1993.5	1725.2	1393.9	1099.4	920.5	846.8	804.8	810.1
15°	2509.0	2409.0	2209.2	1909.3	1483.3	1036.2	767.9	652.2	652.2	662.8	668.0
17.5°	2598.4	2487.9	2230.2	1783.1	1172.9	741.6	604.9	594.3	610.2	636.5	636.5
20°	2687.8	2566.8	2240.8	1583.2	878.4	589.1	573.4	573.4	583.9	610.2	615.4
22.5°	2798.3	2666.7	2230.2	1336.0	657.5	557.5	552.3	552.3	552.3	583.9	583.9
25°	2914.0	2782.5	2188.1	1073.0	557.5	536.5	531.2	526.0	526.0	552.3	557.5
27.5°	3045.5	2903.4	2088.1	820.5	526.0	515.5	510.2	499.7	499.7	520.7	520.7
30°	3177.0	3040.2	1935.6	620.6	499.7	494.4	484.0	473.4	462.9	484.0	484.0
32.5°	3319.0	3182.3	1735.7	494.4	462.9	462.9	457.6	441.8	431.3	441.8	447.1
35°	3508.4	3345.4	1509.6	431.3	415.5	415.5	415.5	410.3	389.2	399.8	399.8
37.5°	3760.9	3571.5	1246.6	399.8	378.7	368.2	368.2	368.2	352.4	357.6	357.6
40°	4081.7	3834.4	994.1	373.5	352.4	326.1	315.6	320.9	310.4	310.4	305.0
42.5°	4518.3	4118.5	747.0	352.4	331.3	294.5	273.5	268.2	257.8	252.5	252.5
45°	5144.2	4465.7	536.5	331.3	315.6	257.8	236.7	221.0	194.7	178.8	178.8
47.5°	5954.2	4860.1	399.8	310.4	299.8	226.2	199.9	168.3	131.4	121.0	121.0
50°	6943.1	5302.0	336.7	278.8	273.5	199.9	157.8	110.5	73.7	63.1	68.3
52.5°	7905.7	5717.6	299.8	247.2	241.9	173.6	115.7	57.9	31.6	31.6	31.6
55°	8715.6	6012.1	273.5	221.0	210.4	136.8	63.1	26.3	15.8	15.8	15.8
57.5°	9446.8	6180.4	247.2	194.7	168.3	94.7	26.3	10.5	10.5	5.2	5.2
60°	10114.8	6280.3	215.6	168.3	131.4	52.6	10.5	5.2	5.2	0.0	0.0
62.5°	10772.3	6354.0	184.1	136.8	99.9	21.1	5.2	5.2	0.0	0.0	0.0
65°	11272.0	6327.7	147.3	110.5	63.1	10.5	5.2	0.0	0.0	0.0	0.0
67.5°	11256.2	5970.0	110.5	84.2	31.6	5.2	0.0	0.0	0.0	0.0	0.0
70°	10067.5	5028.5	73.7	52.6	10.5	5.2	0.0	0.0	0.0	0.0	0.0
72.5°	7143.0	3224.3	47.4	31.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	3145.5	978.4	26.3	15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	615.4	226.2	15.8	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	147.3	26.3	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	63.1	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.8	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.5	5.2	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)