

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: P265750

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265750
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-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 18878.8 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - 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

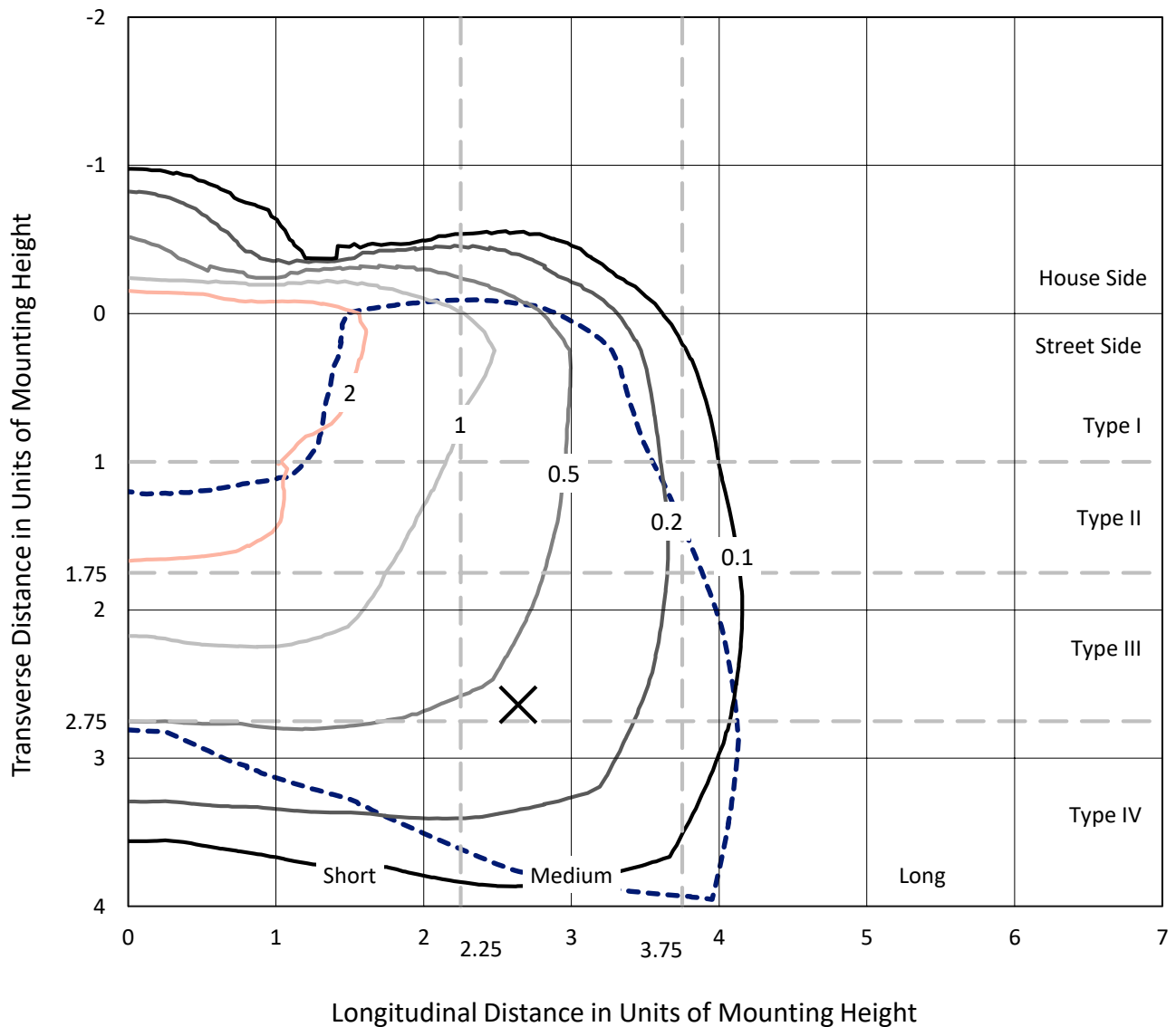


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

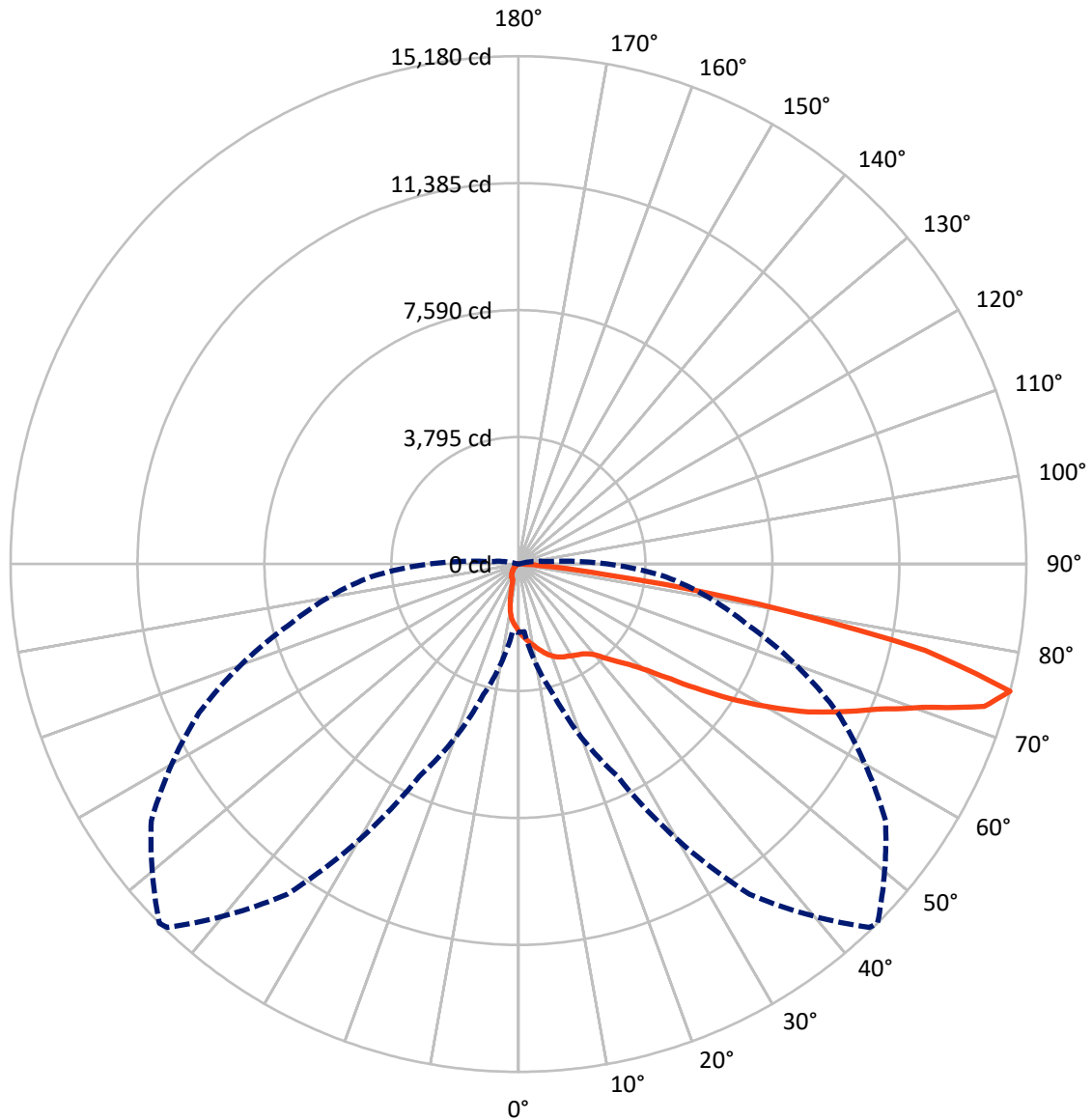


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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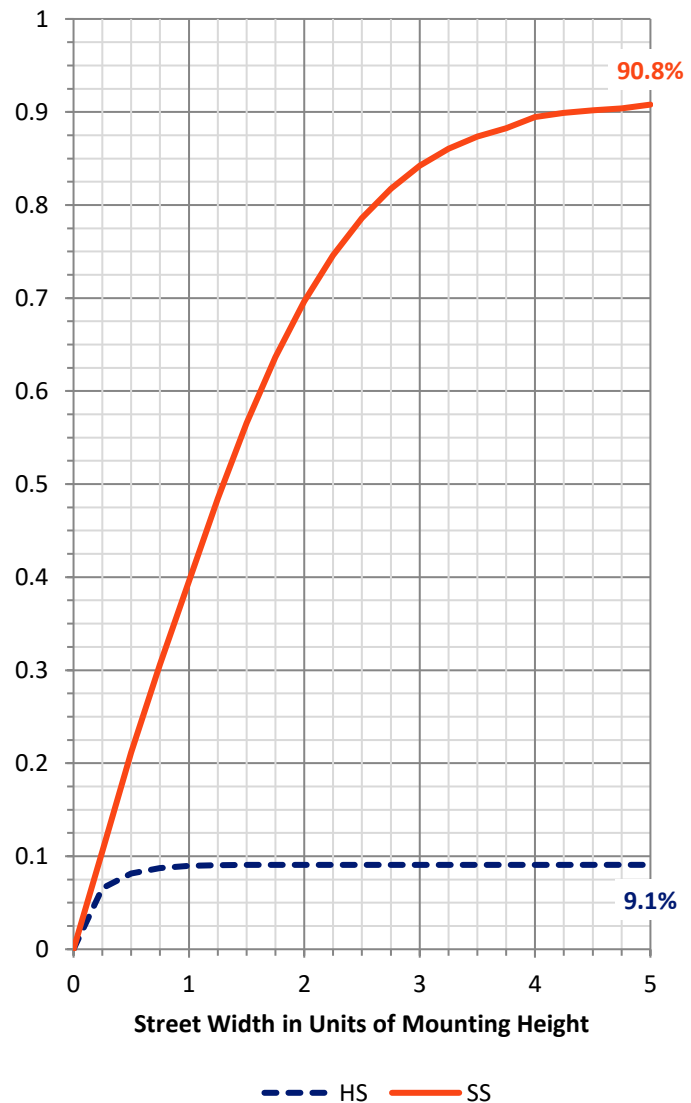
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1726.8	0.0	1726.8
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	17152.0	0.0	17152.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	18878.8	0.0	18878.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.6	1.0
10°-20°	539.9	2.9
20°-30°	894.1	4.7
30°-40°	1294.0	6.9
40°-50°	2118.9	11.2
50°-60°	3775.4	20.0
60°-70°	5550.3	29.4
70°-80°	4187.2	22.2
80°-90°	328.5	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°	18878.8	100.0
0°-180°	18878.8	100.0



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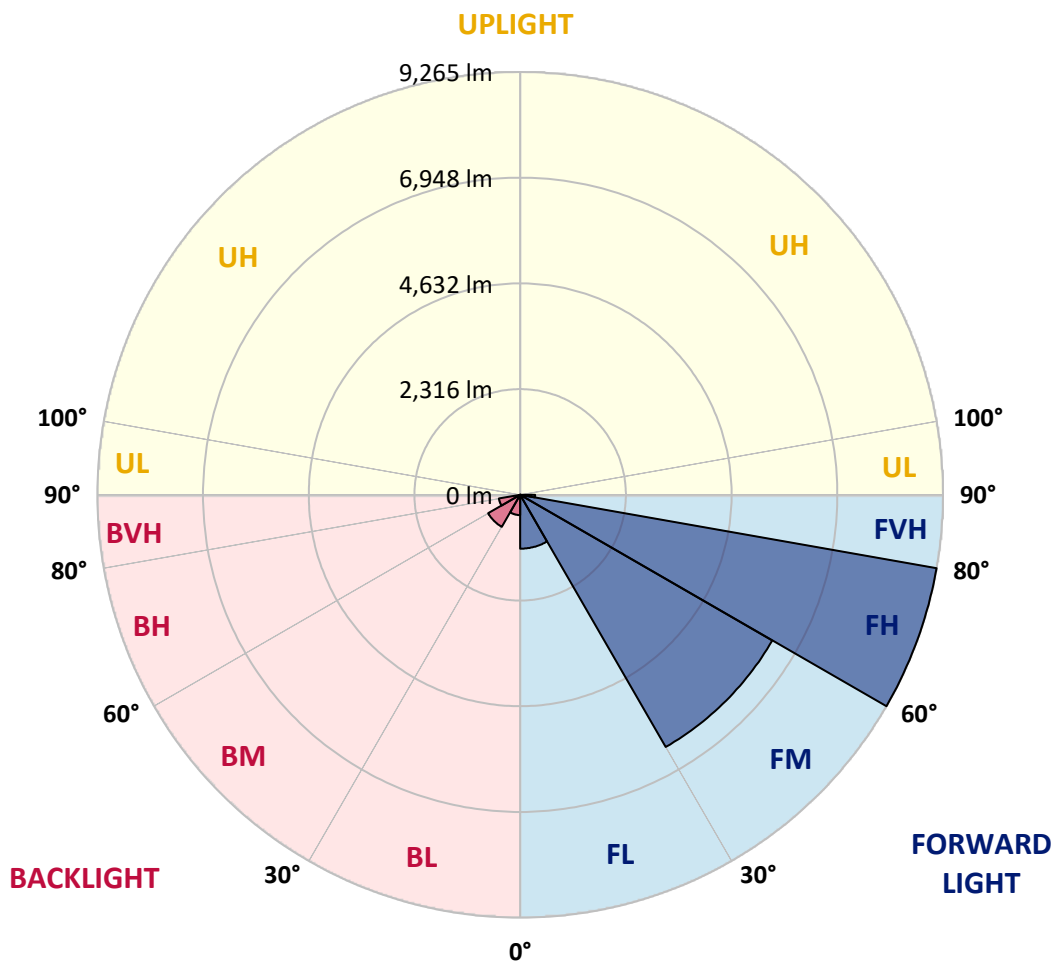
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1180.8	6.3			
FM	(30°-60°)	6379.0	33.8			
FH	(60°-80°)	9264.5	49.1			G4/12000
FVH	(80°-90°)	327.6	1.7			G3/500
BL	(0°-30°)	443.7	2.4	B1/500		
BM	(30°-60°)	809.2	4.3	B1/1000		
BH	(60°-80°)	473.0	2.5	B1/500		G1/500
BVH	(80°-90°)	0.9	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°	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2
2.5°	2193.4	2193.4	2188.9	2184.5	2162.1	2139.9	2135.4	2121.9	2081.7	2055.0	2028.2
5°	2376.6	2381.0	2372.2	2349.7	2300.6	2251.5	2247.0	2211.3	2135.4	2081.7	2023.6
7.5°	2550.7	2559.7	2537.4	2497.2	2439.1	2367.7	2363.3	2296.2	2197.9	2121.9	2037.0
10°	2698.1	2698.1	2667.0	2617.8	2555.3	2479.3	2470.3	2394.4	2282.8	2188.9	2077.3
12.5°	2859.0	2854.5	2809.9	2742.9	2671.4	2600.0	2595.5	2501.7	2394.4	2273.8	2135.4
15°	3006.4	2997.6	2939.4	2876.9	2800.9	2725.0	2720.5	2626.7	2515.1	2372.2	2220.3
17.5°	3086.8	3082.4	3028.7	2966.3	2903.7	2845.7	2841.2	2742.9	2622.2	2474.8	2305.1
20°	3100.3	3104.7	3060.0	3006.4	2970.8	2939.4	2939.4	2850.1	2720.5	2564.2	2394.4
22.5°	3104.7	3118.1	3086.8	3015.4	3006.4	3010.8	3019.8	2948.3	2814.4	2667.0	2488.2
25°	3136.1	3153.9	3131.5	3046.6	3037.7	3069.0	3078.0	3046.6	2926.0	2778.5	2595.5
27.5°	3198.5	3216.4	3198.5	3091.3	3078.0	3109.3	3118.1	3136.1	3046.6	2885.8	2707.1
30°	3323.5	3328.1	3287.8	3153.9	3127.1	3167.2	3180.7	3229.8	3158.4	2988.7	2814.4
32.5°	3542.6	3497.8	3377.2	3198.5	3176.1	3220.9	3234.3	3287.8	3261.0	3086.8	2926.0
35°	3989.3	3756.9	3479.9	3261.0	3238.7	3283.5	3301.4	3377.2	3390.7	3225.4	3064.5
37.5°	3984.8	3774.8	3721.1	3381.7	3350.4	3381.7	3404.0	3497.8	3551.4	3408.4	3265.6
40°	4266.2	4176.8	4176.8	3609.5	3506.8	3551.4	3573.7	3667.6	3761.5	3649.8	3502.3
42.5°	5150.7	5092.6	5030.1	4047.4	3725.7	3850.8	3864.1	3922.2	4033.8	3998.1	3823.9
45°	6137.9	6084.4	5843.1	4788.9	4100.9	4123.3	4154.5	4248.4	4409.2	4476.2	4270.7
47.5°	6910.8	6857.2	6651.7	5682.3	4686.1	4489.5	4489.5	4672.8	4922.9	5092.6	4896.1
50°	7531.7	7469.1	7344.2	6633.9	5646.6	5016.8	4989.8	5204.3	5575.2	5838.7	5704.6
52.5°	8134.8	7951.6	7875.7	7616.5	6732.1	5780.7	5709.1	5861.0	6374.7	6700.8	6589.2
55°	8537.0	8510.1	8429.6	8519.0	7871.3	6709.8	6647.3	6678.4	7321.7	7540.7	7402.3
57.5°	8912.2	8907.7	9086.4	9501.8	9113.1	7772.9	7674.7	7625.5	8237.5	8184.0	8304.7
60°	9376.7	9296.3	9711.8	10306.0	10252.3	8809.4	8697.7	8599.5	8938.9	8787.0	9385.6
62.5°	9399.1	9376.7	10221.0	11074.2	11382.6	9863.7	9734.2	9381.2	9551.0	9376.7	10417.6
65°	8545.8	8657.4	10435.5	11480.8	12329.5	10788.4	10632.0	10082.5	10096.0	9979.8	11632.7
67.5°	8353.7	8411.8	9845.9	11918.6	13013.0	11722.1	11574.7	10891.1	10730.3	10739.2	12352.0
70°	7875.7	7965.1	9113.1	11887.4	13553.5	12968.4	12821.0	12079.4	11690.7	11257.4	11798.0
72.5°	6017.3	6169.3	7679.3	10422.0	13406.1	14599.0	14558.7	13584.9	12074.9	10337.2	8925.5
75°	2037.0	2032.5	4033.8	7000.1	12043.7	15099.3	15179.6	13397.2	10533.7	7129.7	4431.5
77.5°	437.7	442.2	830.9	2836.7	8000.8	12124.1	12432.4	10104.9	6794.7	3176.1	1014.0
80°	214.4	218.8	344.1	750.5	3198.5	6799.1	7281.7	5195.3	2510.7	634.4	169.8
82.5°	107.2	111.7	178.8	397.6	1183.8	2416.8	2582.1	1912.0	719.3	357.3	84.9
85°	40.2	40.2	89.3	236.8	540.5	567.3	696.8	554.0	433.3	290.3	22.4
87.5°	9.0	9.0	49.1	116.2	241.3	178.8	178.8	169.8	263.6	196.5	9.0
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°	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2	2019.2
2.5°	2014.7	1996.8	1965.6	1934.3	1912.0	1885.2	1871.8	1858.4	1853.9	1849.4	1858.4
5°	1992.4	1965.6	1907.6	1858.4	1813.7	1777.9	1751.2	1724.3	1710.9	1702.0	1706.5
7.5°	1992.4	1952.1	1867.2	1791.4	1719.8	1644.0	1568.0	1510.0	1465.2	1438.5	1442.9
10°	2014.7	1961.1	1849.4	1746.7	1612.6	1451.8	1286.6	1161.5	1076.6	1027.4	1027.4
12.5°	2063.9	1992.4	1853.9	1693.0	1465.2	1183.8	933.7	781.7	719.3	683.5	687.9
15°	2130.9	2046.0	1876.2	1621.6	1259.8	880.0	652.2	554.0	554.0	562.9	567.3
17.5°	2206.9	2113.1	1894.0	1514.5	996.2	629.9	513.7	504.8	518.2	540.5	540.5
20°	2282.8	2179.9	1903.0	1344.7	746.0	500.4	486.9	486.9	495.9	518.2	522.6
22.5°	2376.6	2264.8	1894.0	1134.6	558.3	473.5	469.0	469.0	469.0	495.9	495.9
25°	2474.8	2363.3	1858.4	911.3	473.5	455.7	451.2	446.7	446.7	469.0	473.5
27.5°	2586.5	2465.8	1773.6	696.8	446.7	437.7	433.3	424.4	424.4	442.2	442.2
30°	2698.1	2582.1	1644.0	527.1	424.4	419.9	411.0	402.0	393.1	411.0	411.0
32.5°	2818.8	2702.7	1474.2	419.9	393.1	393.1	388.6	375.2	366.2	375.2	379.8
35°	2979.7	2841.2	1282.2	366.2	352.9	352.9	352.9	348.5	330.5	339.5	339.5
37.5°	3194.1	3033.2	1058.7	339.5	321.7	312.7	312.7	312.7	299.3	303.7	303.7
40°	3466.6	3256.6	844.2	317.2	299.3	276.9	268.1	272.5	263.6	263.6	259.2
42.5°	3837.4	3497.8	634.4	299.3	281.3	250.2	232.3	227.8	218.8	214.4	214.4
45°	4368.9	3792.6	455.7	281.3	268.1	218.8	201.0	187.7	165.3	152.0	152.0
47.5°	5056.9	4127.7	339.5	263.6	254.6	192.1	169.8	142.9	111.7	102.8	102.8
50°	5896.7	4502.9	285.9	236.8	232.3	169.8	133.9	93.9	62.5	53.5	58.1
52.5°	6714.2	4855.9	254.6	209.9	205.5	147.4	98.3	49.1	26.8	26.8	26.8
55°	7402.3	5106.1	232.3	187.7	178.8	116.2	53.5	22.4	13.5	13.5	13.5
57.5°	8023.1	5248.9	209.9	165.3	142.9	80.4	22.4	9.0	9.0	4.5	4.5
60°	8590.5	5333.9	183.2	142.9	111.7	44.6	9.0	4.5	4.5	0.0	0.0
62.5°	9148.9	5396.4	156.3	116.2	84.9	17.8	4.5	4.5	0.0	0.0	0.0
65°	9573.2	5374.1	125.0	93.9	53.5	9.0	4.5	0.0	0.0	0.0	0.0
67.5°	9559.9	5070.4	93.9	71.4	26.8	4.5	0.0	0.0	0.0	0.0	0.0
70°	8550.2	4270.7	62.5	44.6	9.0	4.5	0.0	0.0	0.0	0.0	0.0
72.5°	6066.6	2738.5	40.2	26.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2671.4	830.9	22.4	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	522.6	192.1	13.5	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	125.0	22.4	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	53.5	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	4.5	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)