

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: P265696

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265696
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-AF72-220-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA 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: 16315.1 lumens
Efficiency: N/A
Efficacy: 73.5 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): 222
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

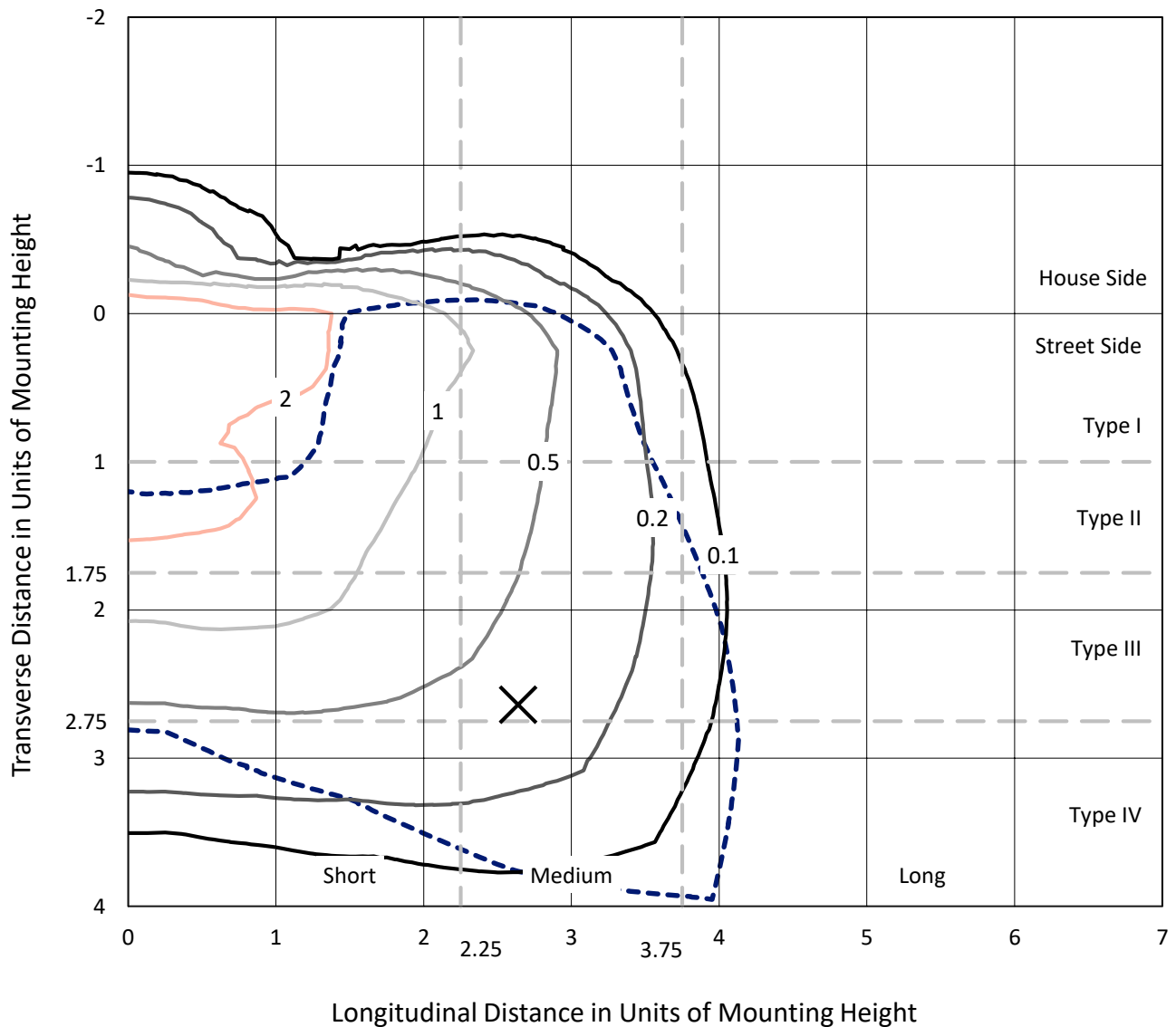


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

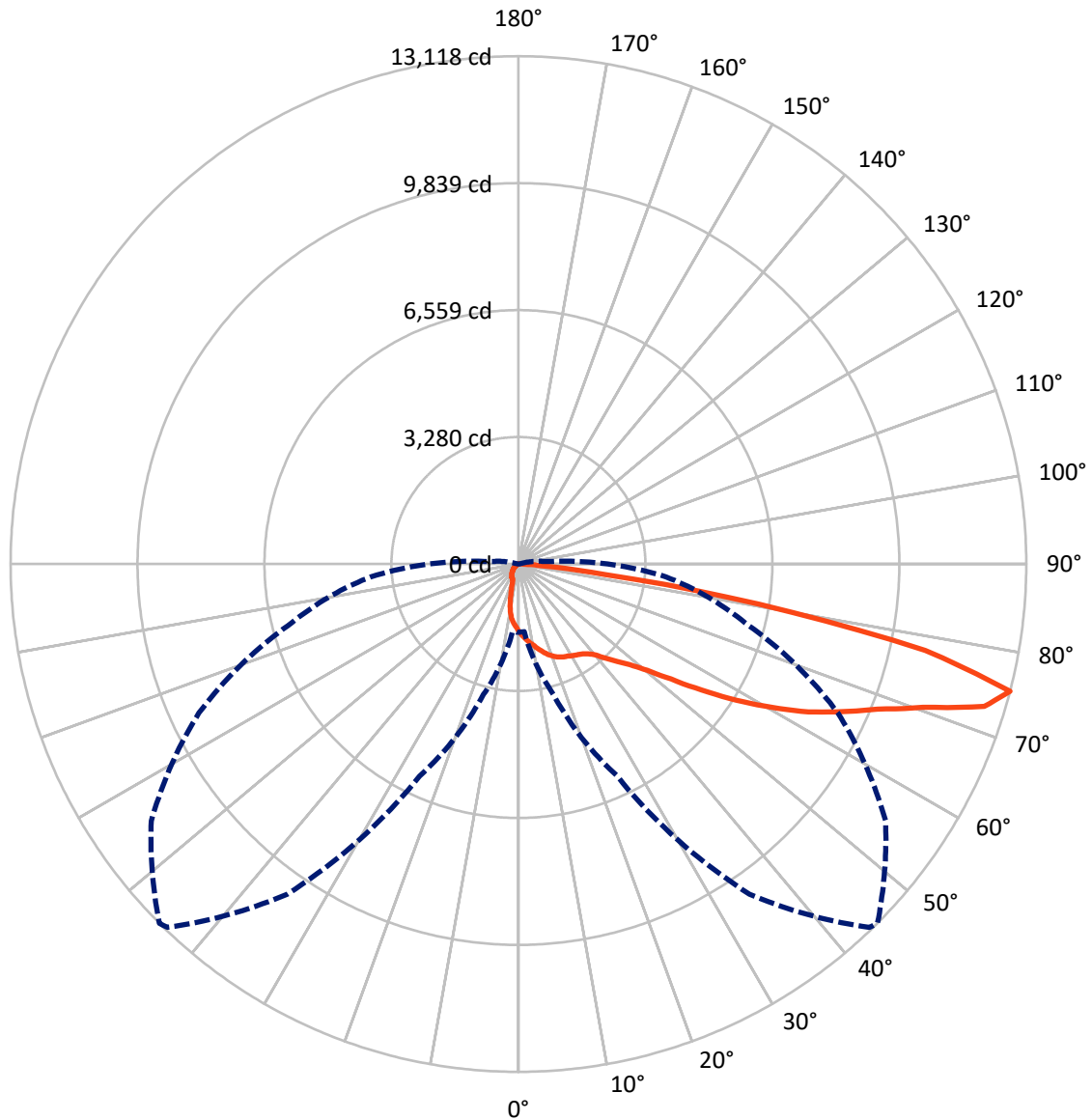


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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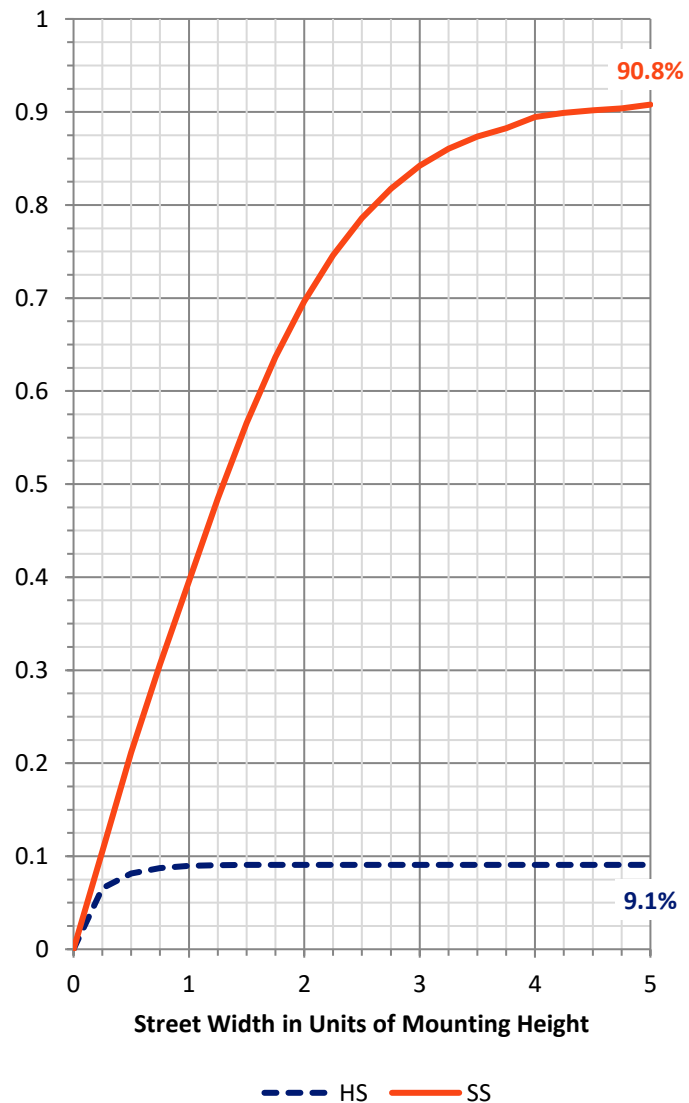
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.3	0.0	1492.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14822.8	0.0	14822.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	16315.1	0.0	16315.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.7	1.0
10°-20°	466.6	2.9
20°-30°	772.7	4.7
30°-40°	1118.3	6.9
40°-50°	1831.1	11.2
50°-60°	3262.7	20.0
60°-70°	4796.6	29.4
70°-80°	3618.6	22.2
80°-90°	283.9	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°	16315.1	100.0
0°-180°	16315.1	100.0



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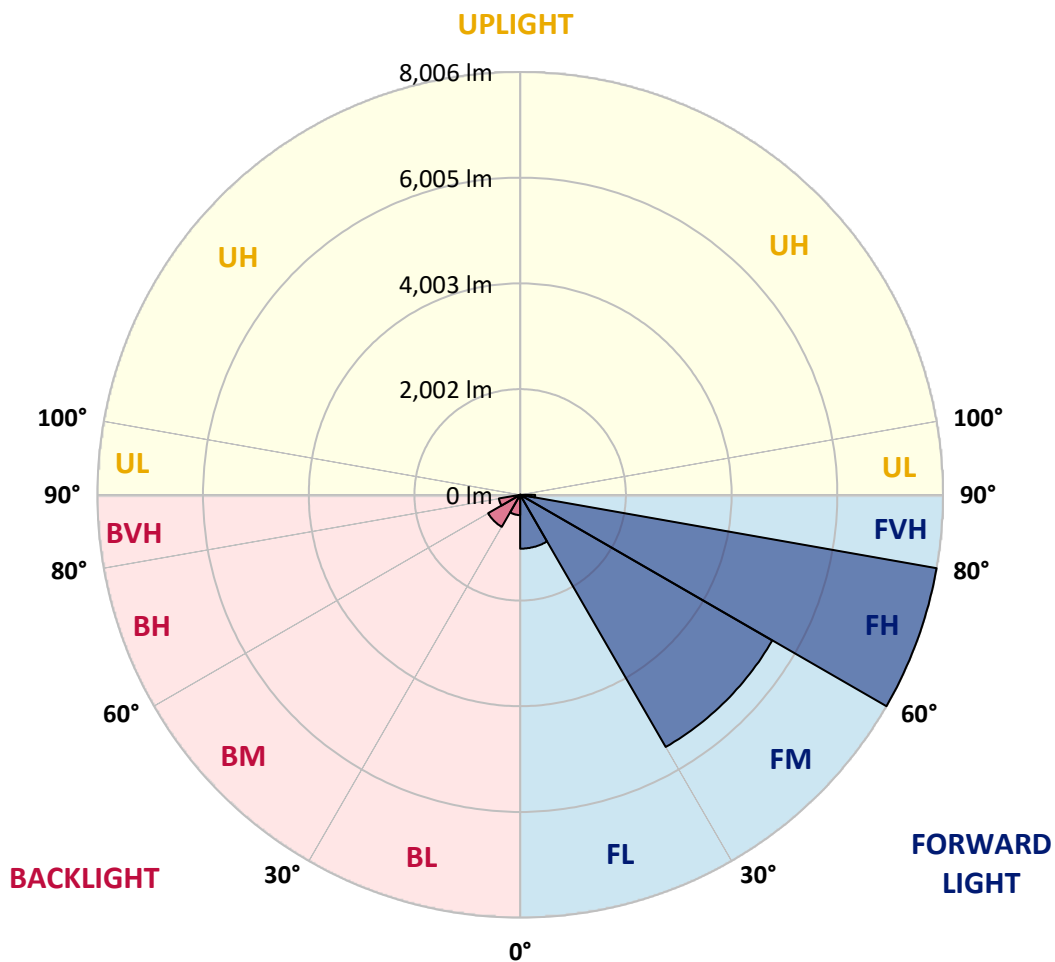
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1020.5	6.3			
FM	(30°-60°)	5512.8	33.8			
FH	(60°-80°)	8006.4	49.1			G4/12000
FVH	(80°-90°)	283.1	1.7			G3/500
BL	(0°-30°)	383.5	2.4	B1/500		
BM	(30°-60°)	699.3	4.3	B1/1000		
BH	(60°-80°)	408.7	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°	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0
2.5°	1895.6	1895.6	1891.7	1887.9	1868.6	1849.3	1845.4	1833.8	1799.0	1775.9	1752.8
5°	2053.9	2057.7	2050.0	2030.7	1988.2	1945.8	1941.9	1911.1	1845.4	1799.0	1748.9
7.5°	2204.4	2212.2	2192.9	2158.1	2108.0	2046.1	2042.2	1984.4	1899.5	1833.8	1760.5
10°	2331.8	2331.8	2304.8	2262.3	2208.3	2142.6	2134.9	2069.2	1972.8	1891.7	1795.3
12.5°	2470.8	2466.9	2428.3	2370.4	2308.6	2246.9	2243.0	2162.0	2069.2	1965.0	1845.4
15°	2598.2	2590.4	2540.2	2486.1	2420.7	2354.9	2351.1	2270.0	2173.4	2050.0	1918.7
17.5°	2667.6	2663.8	2617.5	2563.5	2509.3	2459.2	2455.3	2370.4	2266.2	2138.8	1992.1
20°	2679.3	2683.1	2644.5	2598.2	2567.3	2540.2	2540.2	2463.1	2351.1	2215.9	2069.2
22.5°	2683.1	2694.6	2667.6	2606.0	2598.2	2602.0	2609.8	2548.0	2432.3	2304.8	2150.4
25°	2710.1	2725.5	2706.2	2632.9	2625.1	2652.2	2659.9	2632.9	2528.6	2401.3	2243.0
27.5°	2764.3	2779.6	2764.3	2671.5	2659.9	2687.0	2694.6	2710.1	2632.9	2494.0	2339.5
30°	2872.3	2876.2	2841.3	2725.5	2702.5	2737.1	2748.8	2791.3	2729.4	2582.7	2432.3
32.5°	3061.5	3022.8	2918.7	2764.3	2745.0	2783.5	2795.0	2841.3	2818.3	2667.6	2528.6
35°	3447.5	3246.7	3007.4	2818.3	2798.9	2837.6	2852.9	2918.7	2930.2	2787.4	2648.4
37.5°	3443.7	3262.3	3215.9	2922.5	2895.4	2922.5	2941.8	3022.8	3069.1	2945.6	2822.1
40°	3686.9	3609.7	3609.7	3119.4	3030.6	3069.1	3088.6	3169.6	3250.6	3154.0	3026.7
42.5°	4451.3	4401.1	4347.1	3497.7	3219.7	3327.9	3339.4	3389.7	3486.1	3455.2	3304.7
45°	5304.5	5258.1	5049.7	4138.6	3544.1	3563.3	3590.3	3671.5	3810.4	3868.3	3690.7
47.5°	5972.3	5925.9	5748.4	4910.7	4049.7	3879.9	3879.9	4038.2	4254.5	4401.1	4231.2
50°	6508.9	6455.0	6346.9	5733.1	4879.9	4335.5	4312.4	4497.6	4818.0	5045.8	4930.0
52.5°	7030.1	6871.9	6806.3	6582.3	5818.0	4995.7	4933.9	5065.2	5509.0	5791.0	5694.4
55°	7377.6	7354.5	7285.0	7362.1	6802.3	5798.6	5744.7	5771.6	6327.5	6516.8	6397.0
57.5°	7701.9	7698.0	7852.4	8211.5	7875.6	6717.4	6632.5	6590.1	7119.0	7072.6	7176.9
60°	8103.4	8033.9	8393.0	8906.4	8860.2	7613.1	7516.6	7431.7	7725.1	7593.8	8111.2
62.5°	8122.7	8103.4	8833.0	9570.5	9836.8	8524.2	8412.3	8107.3	8253.9	8103.4	9003.0
65°	7385.3	7481.9	9018.4	9921.8	10655.2	9323.4	9188.3	8713.4	8725.0	8624.5	10053.0
67.5°	7219.4	7269.5	8508.7	10300.1	11245.9	10130.2	10002.8	9412.3	9273.2	9280.8	10674.6
70°	6806.3	6883.4	7875.6	10273.0	11713.1	11207.3	11080.0	10439.2	10103.1	9728.7	10195.9
72.5°	5200.3	5331.5	6636.4	9006.8	11585.7	12616.4	12581.8	11740.0	10435.3	8933.5	7713.4
75°	1760.5	1756.5	3486.1	6049.5	10408.2	13048.9	13118.4	11578.0	9103.3	6161.6	3829.7
77.5°	378.4	382.1	718.0	2451.5	6914.3	10477.7	10744.1	8732.8	5872.0	2745.0	876.3
80°	185.3	189.2	297.2	648.5	2764.3	5875.9	6292.7	4489.9	2169.6	548.2	146.8
82.5°	92.6	96.5	154.4	343.6	1023.1	2088.6	2231.4	1652.3	621.5	308.8	73.3
85°	34.8	34.8	77.3	204.6	467.1	490.3	602.3	478.6	374.5	250.9	19.4
87.5°	7.7	7.7	42.5	100.4	208.4	154.4	154.4	146.8	227.8	169.9	7.7
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°	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0	1745.0
2.5°	1741.2	1725.7	1698.7	1671.7	1652.3	1629.2	1617.6	1606.0	1602.1	1598.3	1606.0
5°	1721.8	1698.7	1648.5	1606.0	1567.5	1536.6	1513.4	1490.2	1478.6	1470.9	1474.7
7.5°	1721.8	1687.0	1613.7	1548.0	1486.3	1420.7	1355.1	1304.9	1266.3	1243.2	1246.9
10°	1741.2	1694.8	1598.3	1509.5	1393.7	1254.8	1111.8	1003.8	930.5	888.0	888.0
12.5°	1783.7	1721.8	1602.1	1463.2	1266.3	1023.1	806.9	675.6	621.5	590.6	594.6
15°	1841.5	1768.1	1621.4	1401.4	1088.7	760.5	563.6	478.6	478.6	486.4	490.3
17.5°	1907.1	1826.1	1636.9	1308.7	860.9	544.4	443.9	436.2	447.9	467.1	467.1
20°	1972.8	1883.9	1644.6	1162.0	644.8	432.4	420.8	420.8	428.5	447.9	451.7
22.5°	2053.9	1957.3	1636.9	980.6	482.6	409.2	405.3	405.3	405.3	428.5	428.5
25°	2138.8	2042.2	1606.0	787.5	409.2	393.7	390.0	386.0	386.0	405.3	409.2
27.5°	2235.3	2131.0	1532.7	602.3	386.0	378.4	374.5	366.8	366.8	382.1	382.1
30°	2331.8	2231.4	1420.7	455.5	366.8	362.8	355.2	347.5	339.6	355.2	355.2
32.5°	2436.1	2335.7	1273.9	362.8	339.6	339.6	335.8	324.3	316.6	324.3	328.2
35°	2575.0	2455.3	1108.0	316.6	305.0	305.0	305.0	301.1	285.8	293.3	293.3
37.5°	2760.3	2621.3	915.0	293.3	277.9	270.2	270.2	270.2	258.6	262.6	262.6
40°	2995.8	2814.4	729.7	274.2	258.6	239.4	231.7	235.4	227.8	227.8	223.9
42.5°	3316.3	3022.8	548.2	258.6	243.3	216.2	200.7	196.9	189.2	185.3	185.3
45°	3775.7	3277.6	393.7	243.3	231.7	189.2	173.7	162.1	142.8	131.2	131.2
47.5°	4370.3	3567.2	293.3	227.8	220.1	165.9	146.8	123.5	96.5	88.8	88.8
50°	5096.1	3891.5	247.0	204.6	200.7	146.8	115.8	81.0	54.1	46.4	50.1
52.5°	5802.5	4196.5	220.1	181.5	177.5	127.4	84.9	42.5	23.1	23.1	23.1
55°	6397.0	4412.7	200.7	162.1	154.4	100.4	46.4	19.4	11.6	11.6	11.6
57.5°	6933.7	4536.3	181.5	142.8	123.5	69.4	19.4	7.7	7.7	3.9	3.9
60°	7424.0	4609.6	158.3	123.5	96.5	38.5	7.7	3.9	3.9	0.0	0.0
62.5°	7906.5	4663.6	135.1	100.4	73.3	15.5	3.9	3.9	0.0	0.0	0.0
65°	8273.3	4644.2	108.1	81.0	46.4	7.7	3.9	0.0	0.0	0.0	0.0
67.5°	8261.7	4381.8	81.0	61.8	23.1	3.9	0.0	0.0	0.0	0.0	0.0
70°	7389.2	3690.7	54.1	38.5	7.7	3.9	0.0	0.0	0.0	0.0	0.0
72.5°	5242.7	2366.6	34.8	23.1	3.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2308.6	718.0	19.4	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	451.7	165.9	11.6	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	108.1	19.4	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.4	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	3.9	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)