

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: P237448

Luminaire Tested: **ARCH-L-AF72-150-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237448
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-AF72-150-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 665mA 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: 14777.6 lumens
Efficiency: N/A
Efficacy: 96.6 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 - G3

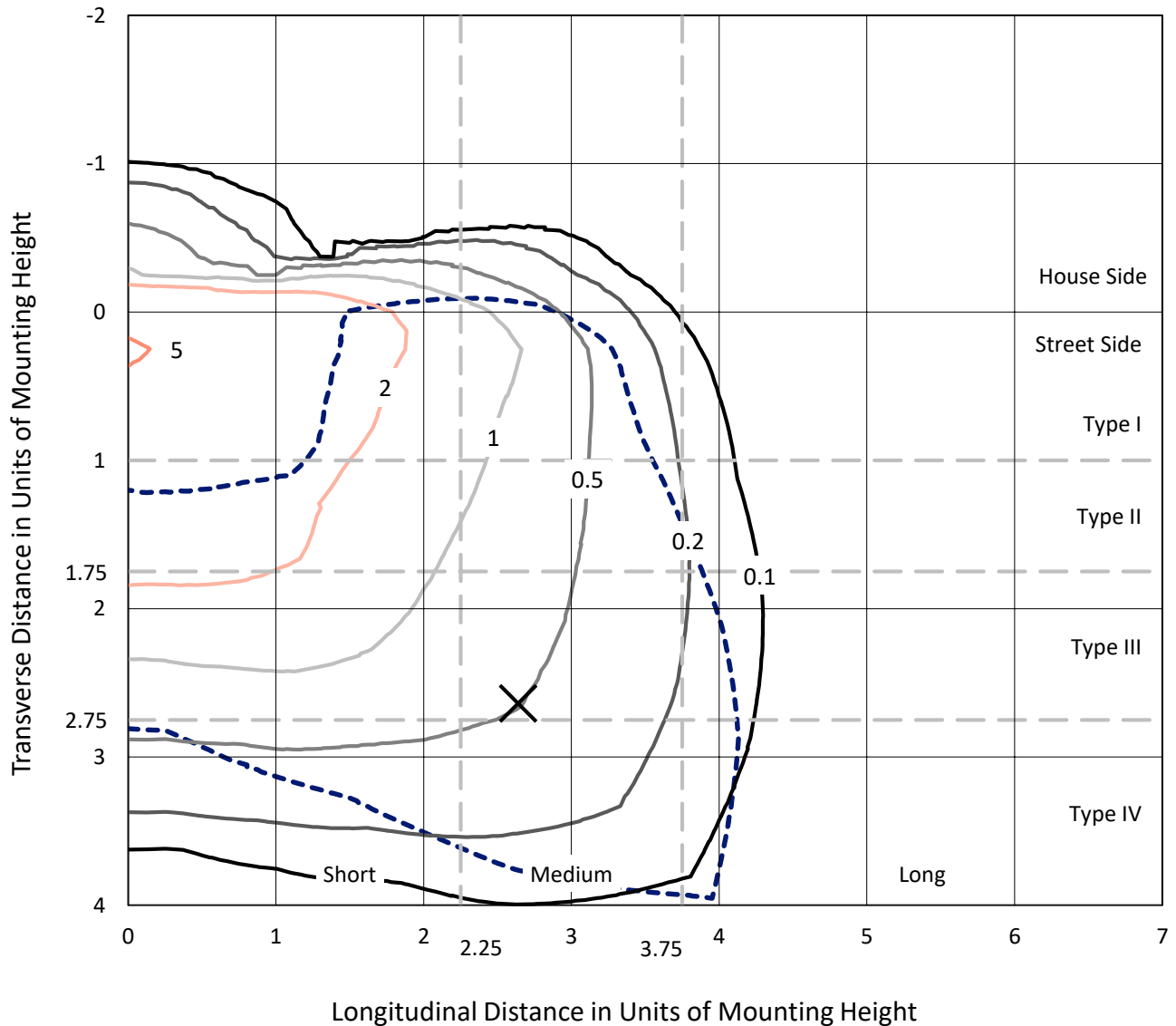
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

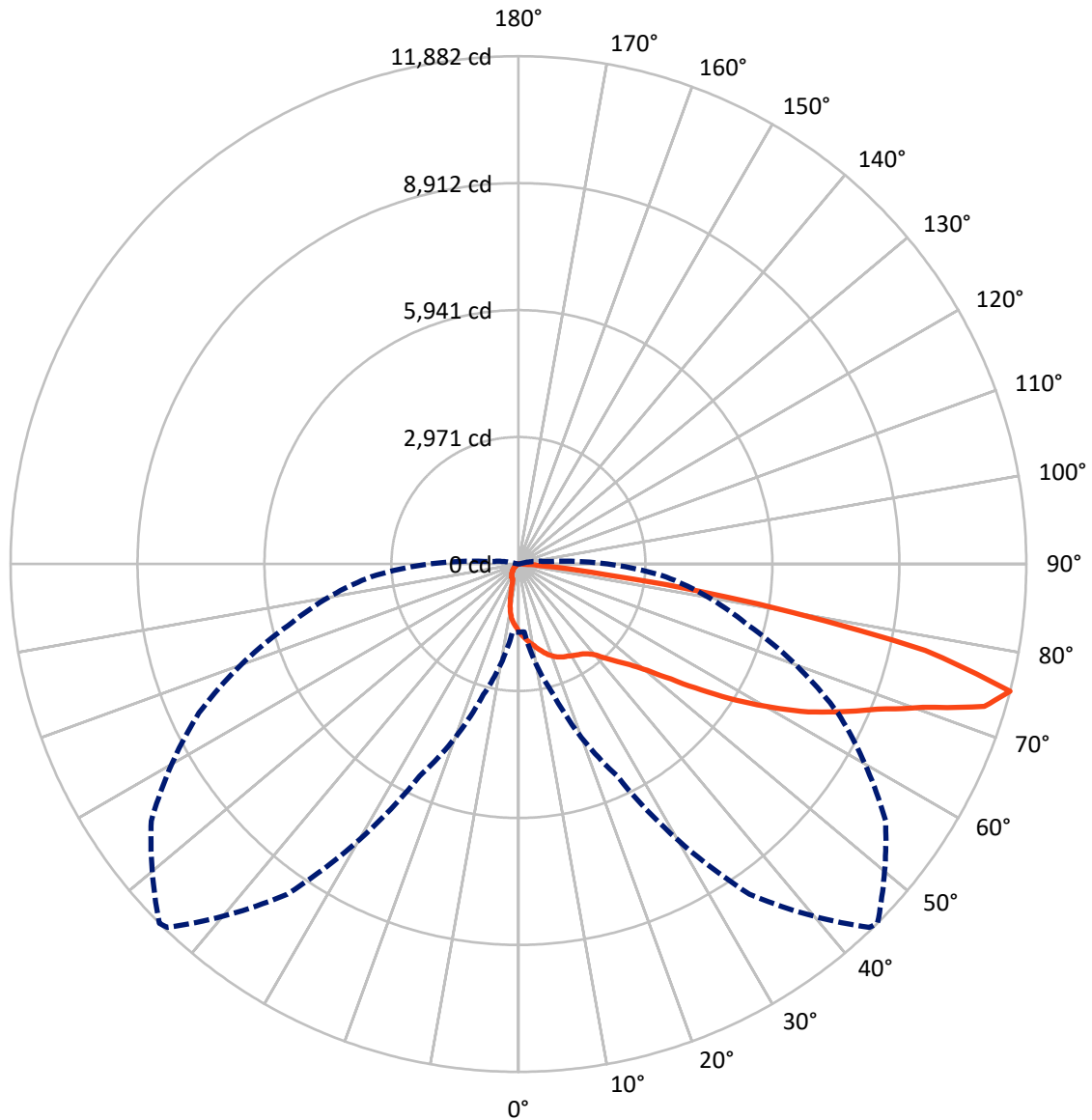


Based on 20 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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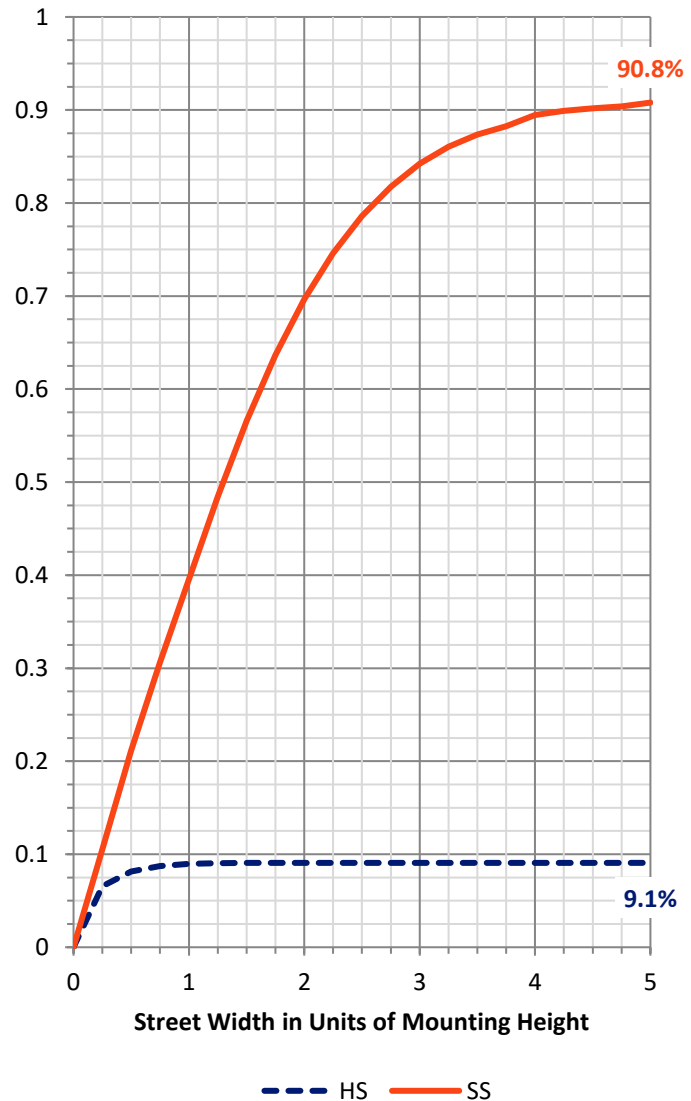
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1351.7	0.0	1351.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	13425.9	0.0	13425.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	14777.6	0.0	14777.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.2	1.0
10°-20°	422.6	2.9
20°-30°	699.9	4.7
30°-40°	1012.9	6.9
40°-50°	1658.6	11.2
50°-60°	2955.2	20.0
60°-70°	4344.5	29.4
70°-80°	3277.6	22.2
80°-90°	257.1	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°	14777.6	100.0
0°-180°	14777.6	100.0



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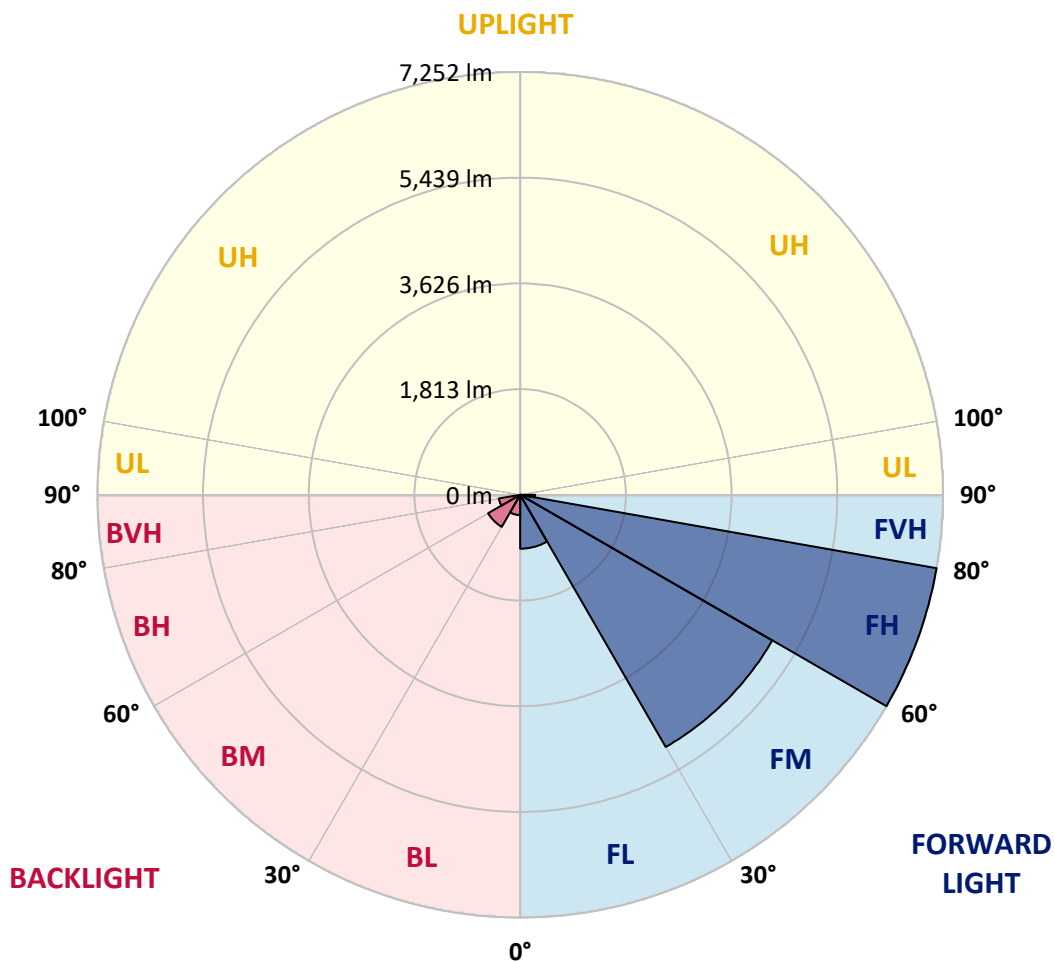
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	924.3	6.3			
FM	(30°-60°)	4993.3	33.8			
FH	(60°-80°)	7251.9	49.1			G3/7500
FVH	(80°-90°)	256.4	1.7			G3/500
BL	(0°-30°)	347.3	2.4	B1/500		
BM	(30°-60°)	633.4	4.3	B1/1000		
BH	(60°-80°)	370.2	2.5	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6
2.5°	1716.9	1716.9	1713.4	1710.0	1692.5	1675.0	1671.5	1661.0	1629.5	1608.5	1587.5
5°	1860.2	1863.8	1856.8	1839.3	1800.8	1762.3	1758.9	1730.9	1671.5	1629.5	1584.0
7.5°	1996.7	2003.7	1986.2	1954.7	1909.2	1853.3	1849.8	1797.3	1720.4	1661.0	1594.6
10°	2112.1	2112.1	2087.5	2049.1	2000.2	1940.7	1933.7	1874.3	1786.9	1713.4	1626.0
12.5°	2237.9	2234.4	2199.4	2147.0	2091.1	2035.2	2031.6	1958.2	1874.3	1779.8	1671.5
15°	2353.3	2346.3	2300.9	2251.9	2192.5	2133.1	2129.6	2056.1	1968.7	1856.8	1737.9
17.5°	2416.3	2412.7	2370.8	2321.9	2272.9	2227.5	2223.9	2147.0	2052.7	1937.2	1804.4
20°	2426.7	2430.2	2395.2	2353.3	2325.4	2300.9	2300.9	2231.0	2129.6	2007.1	1874.3
22.5°	2430.2	2440.8	2416.3	2360.4	2353.3	2356.8	2363.8	2307.9	2202.9	2087.5	1947.7
25°	2454.8	2468.7	2451.2	2384.8	2377.8	2402.3	2409.3	2384.8	2290.4	2175.0	2031.6
27.5°	2503.7	2517.7	2503.7	2419.8	2409.3	2433.7	2440.8	2454.8	2384.8	2258.9	2119.0
30°	2601.6	2605.0	2573.6	2468.7	2447.7	2479.2	2489.7	2528.1	2472.2	2339.4	2202.9
32.5°	2772.9	2737.9	2643.5	2503.7	2486.2	2521.2	2531.7	2573.6	2552.7	2416.3	2290.4
35°	3122.7	2940.8	2724.0	2552.7	2535.2	2570.2	2584.1	2643.5	2654.0	2524.6	2398.8
37.5°	3119.1	2954.8	2912.9	2647.1	2622.5	2647.1	2664.6	2737.9	2780.0	2668.1	2556.1
40°	3339.4	3269.5	3269.5	2825.4	2745.0	2780.0	2797.5	2870.8	2944.3	2856.9	2741.5
42.5°	4031.8	3986.3	3937.3	3168.1	2916.3	3014.2	3024.7	3070.2	3157.5	3129.6	2993.3
45°	4804.6	4762.6	4573.8	3748.5	3210.0	3227.5	3252.0	3325.4	3451.3	3503.8	3342.9
47.5°	5409.5	5367.5	5206.7	4447.9	3668.1	3514.2	3514.2	3657.7	3853.5	3986.3	3832.5
50°	5895.6	5846.6	5748.7	5192.7	4419.9	3926.9	3905.9	4073.7	4364.0	4570.2	4465.4
52.5°	6367.7	6224.2	6164.8	5962.0	5269.6	4524.8	4468.9	4587.7	4989.9	5245.2	5157.7
55°	6682.3	6661.4	6598.4	6668.3	6161.3	5252.1	5203.2	5227.7	5731.2	5902.5	5794.1
57.5°	6976.0	6972.5	7112.5	7437.7	7133.4	6084.4	6007.5	5969.0	6448.1	6406.1	6500.4
60°	7339.7	7276.8	7602.0	8067.1	8025.0	6895.6	6808.2	6731.3	6997.0	6878.1	7346.7
62.5°	7357.2	7339.7	8000.6	8668.5	8909.8	7720.8	7619.4	7343.3	7476.1	7339.7	8154.5
65°	6689.3	6776.7	8168.5	8986.7	9651.0	8444.7	8322.3	7892.2	7902.7	7811.8	9105.6
67.5°	6538.9	6584.4	7706.9	9329.4	10186.0	9175.6	9060.2	8525.1	8399.2	8406.2	9668.5
70°	6164.8	6234.8	7133.4	9304.9	10609.2	10151.2	10035.8	9455.2	9151.0	8811.9	9235.0
72.5°	4710.2	4829.0	6011.0	8157.9	10493.8	11427.5	11396.0	10633.7	9451.8	8091.5	6986.5
75°	1594.6	1591.0	3157.5	5479.4	9427.3	11819.1	11882.0	10486.8	8245.4	5580.8	3468.8
77.5°	342.7	346.2	650.4	2220.4	6262.7	9490.2	9731.5	7909.7	5318.6	2486.2	793.8
80°	167.9	171.3	269.2	587.5	2503.7	5322.1	5699.8	4066.7	1965.2	496.5	132.9
82.5°	83.9	87.5	139.8	311.2	926.7	1891.7	2021.1	1496.6	562.9	279.8	66.4
85°	31.5	31.5	70.0	185.4	423.1	444.1	545.5	433.6	339.2	227.3	17.5
87.5°	7.0	7.0	38.5	90.9	188.8	139.8	139.8	132.9	206.3	153.9	7.0
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°	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6	1580.6
2.5°	1577.1	1563.1	1538.6	1514.1	1496.6	1475.6	1465.2	1454.6	1451.2	1447.7	1454.6
5°	1559.6	1538.6	1493.1	1454.6	1419.7	1391.7	1370.8	1349.8	1339.2	1332.3	1335.8
7.5°	1559.6	1528.1	1461.7	1402.2	1346.3	1286.8	1227.3	1181.9	1146.9	1126.0	1129.4
10°	1577.1	1535.0	1447.7	1367.3	1262.3	1136.5	1007.1	909.2	842.7	804.2	804.2
12.5°	1615.5	1559.6	1451.2	1325.2	1146.9	926.7	730.8	611.9	562.9	535.0	538.5
15°	1667.9	1601.5	1468.7	1269.3	986.1	688.9	510.6	433.6	433.6	440.6	444.1
17.5°	1727.4	1654.0	1482.7	1185.4	779.8	493.1	402.1	395.2	405.6	423.1	423.1
20°	1786.9	1706.4	1489.6	1052.5	584.0	391.7	381.2	381.2	388.1	405.6	409.1
22.5°	1860.2	1772.9	1482.7	888.2	437.1	370.6	367.1	367.1	367.1	388.1	388.1
25°	1937.2	1849.8	1454.6	713.3	370.6	356.7	353.1	349.6	349.6	367.1	370.6
27.5°	2024.6	1930.2	1388.2	545.5	349.6	342.7	339.2	332.2	332.2	346.2	346.2
30°	2112.1	2021.1	1286.8	412.7	332.2	328.7	321.7	314.7	307.7	321.7	321.7
32.5°	2206.5	2115.6	1153.9	328.7	307.7	307.7	304.2	293.7	286.7	293.7	297.3
35°	2332.3	2223.9	1003.6	286.7	276.2	276.2	276.2	272.7	258.8	265.8	265.8
37.5°	2500.2	2374.3	828.7	265.8	251.7	244.8	244.8	244.8	234.3	237.7	237.7
40°	2713.5	2549.2	660.9	248.3	234.3	216.8	209.8	213.3	206.3	206.3	202.9
42.5°	3003.7	2737.9	496.5	234.3	220.3	195.8	181.9	178.3	171.3	167.9	167.9
45°	3419.8	2968.7	356.7	220.3	209.8	171.3	157.3	146.9	129.4	118.9	118.9
47.5°	3958.3	3231.0	265.8	206.3	199.3	150.4	132.9	111.9	87.5	80.4	80.4
50°	4615.8	3524.8	223.8	185.4	181.9	132.9	104.9	73.4	49.0	41.9	45.4
52.5°	5255.6	3801.0	199.3	164.4	160.8	115.4	76.9	38.5	21.0	21.0	21.0
55°	5794.1	3996.8	181.9	146.9	139.8	90.9	41.9	17.5	10.5	10.5	10.5
57.5°	6280.2	4108.7	164.4	129.4	111.9	62.9	17.5	7.0	7.0	3.5	3.5
60°	6724.3	4175.2	143.4	111.9	87.5	35.0	7.0	3.5	3.5	0.0	0.0
62.5°	7161.4	4224.1	122.3	90.9	66.4	14.0	3.5	3.5	0.0	0.0	0.0
65°	7493.5	4206.6	97.9	73.4	41.9	7.0	3.5	0.0	0.0	0.0	0.0
67.5°	7483.1	3968.8	73.4	56.0	21.0	3.5	0.0	0.0	0.0	0.0	0.0
70°	6692.9	3342.9	49.0	35.0	7.0	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	4748.6	2143.5	31.5	21.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2091.1	650.4	17.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	409.1	150.4	10.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	97.9	17.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	3.5	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)