

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: P237449

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237449
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-AF72-160-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA 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: 15468.1 lumens
Efficiency: N/A
Efficacy: 95.5 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

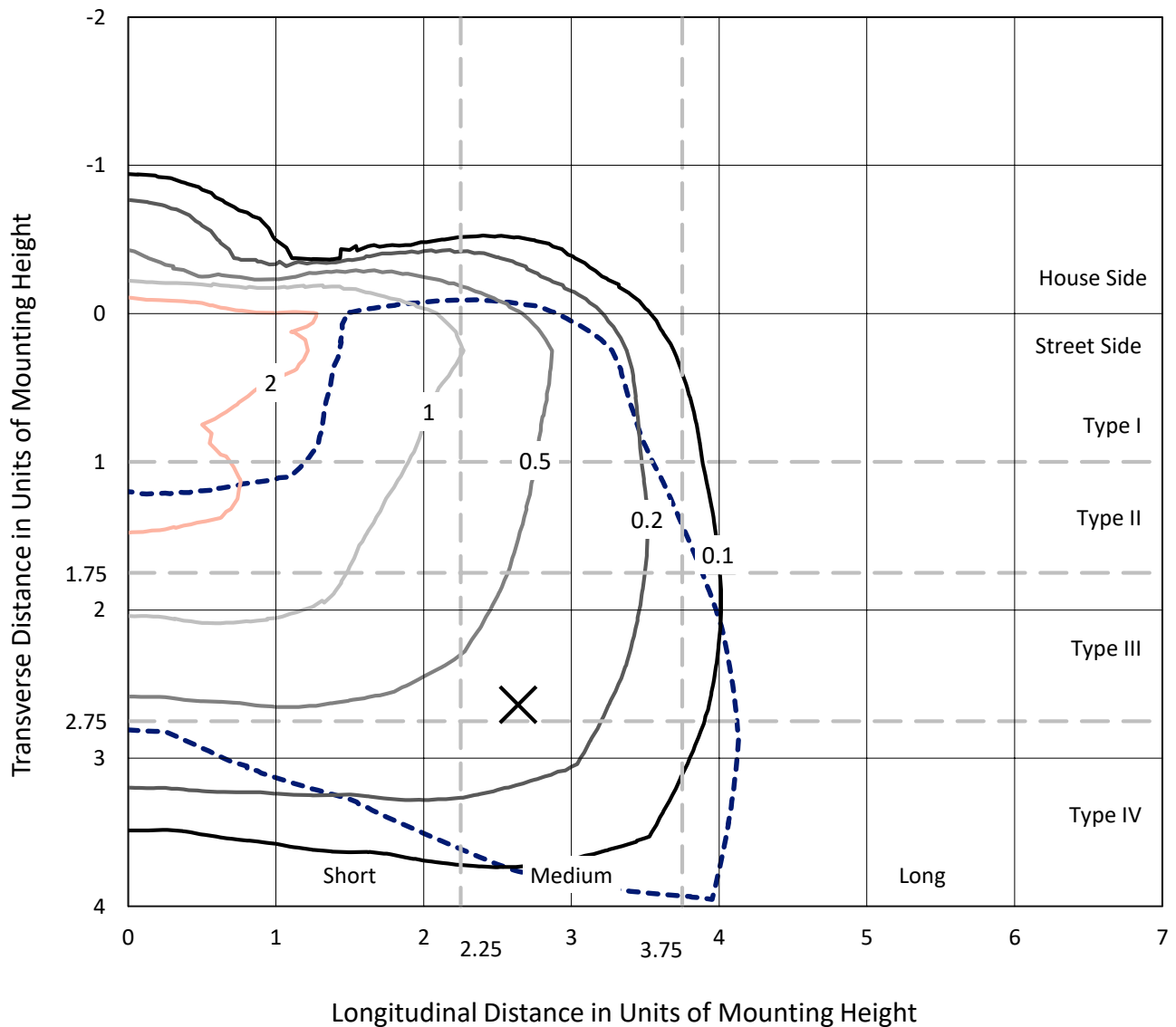
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

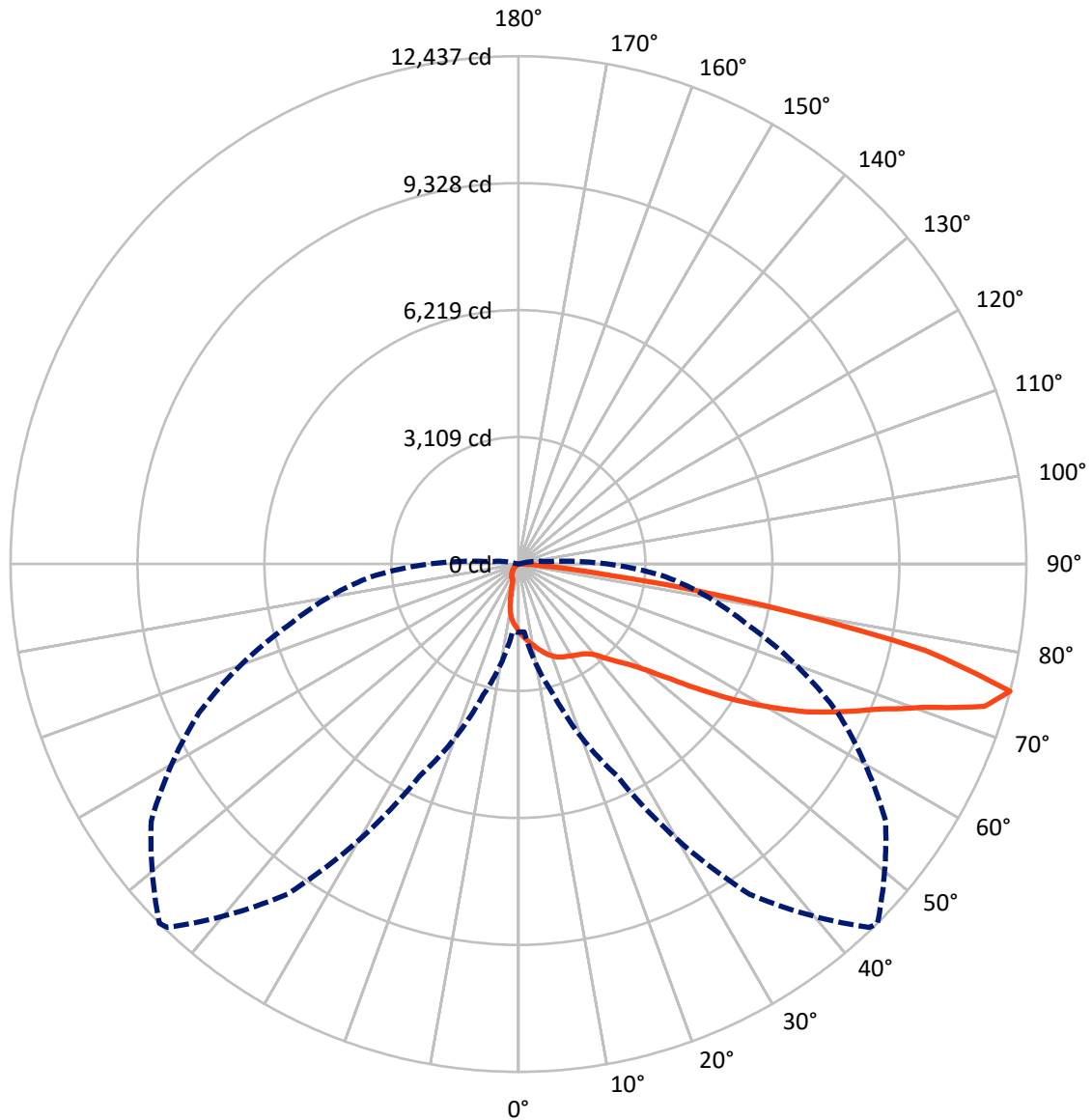


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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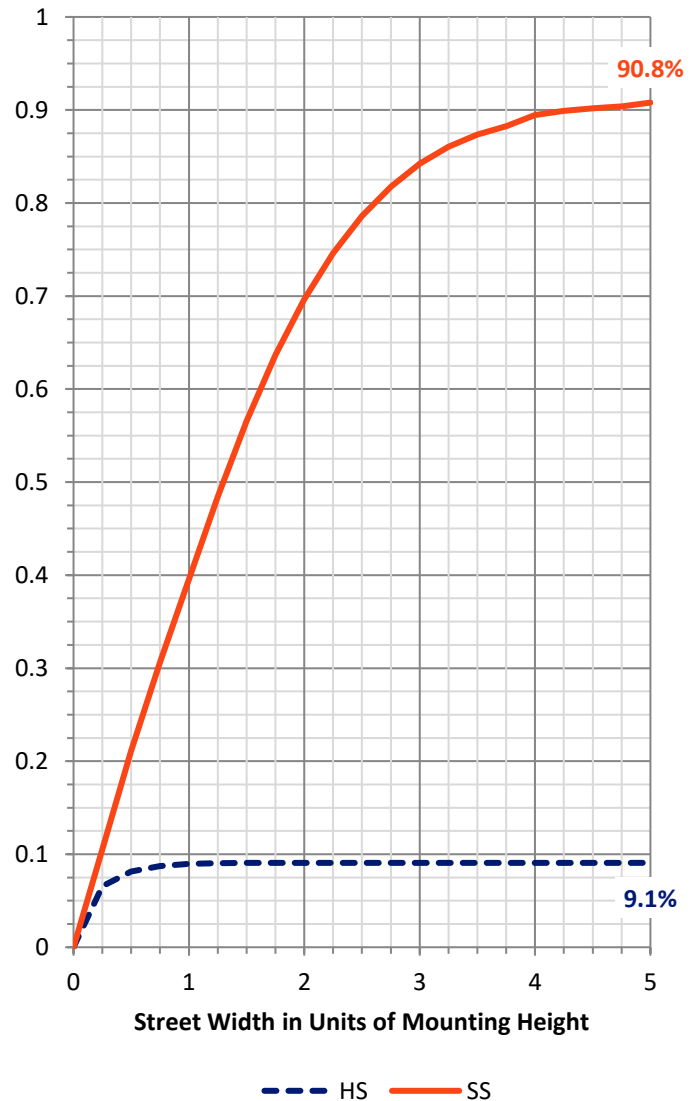
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1414.9	0.0	1414.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14053.2	0.0	14053.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	15468.1	0.0	15468.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	1.0
10°-20°	442.3	2.9
20°-30°	732.6	4.7
30°-40°	1060.2	6.9
40°-50°	1736.1	11.2
50°-60°	3093.3	20.0
60°-70°	4547.5	29.4
70°-80°	3430.7	22.2
80°-90°	269.2	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°	15468.1	100.0
0°-180°	15468.1	100.0



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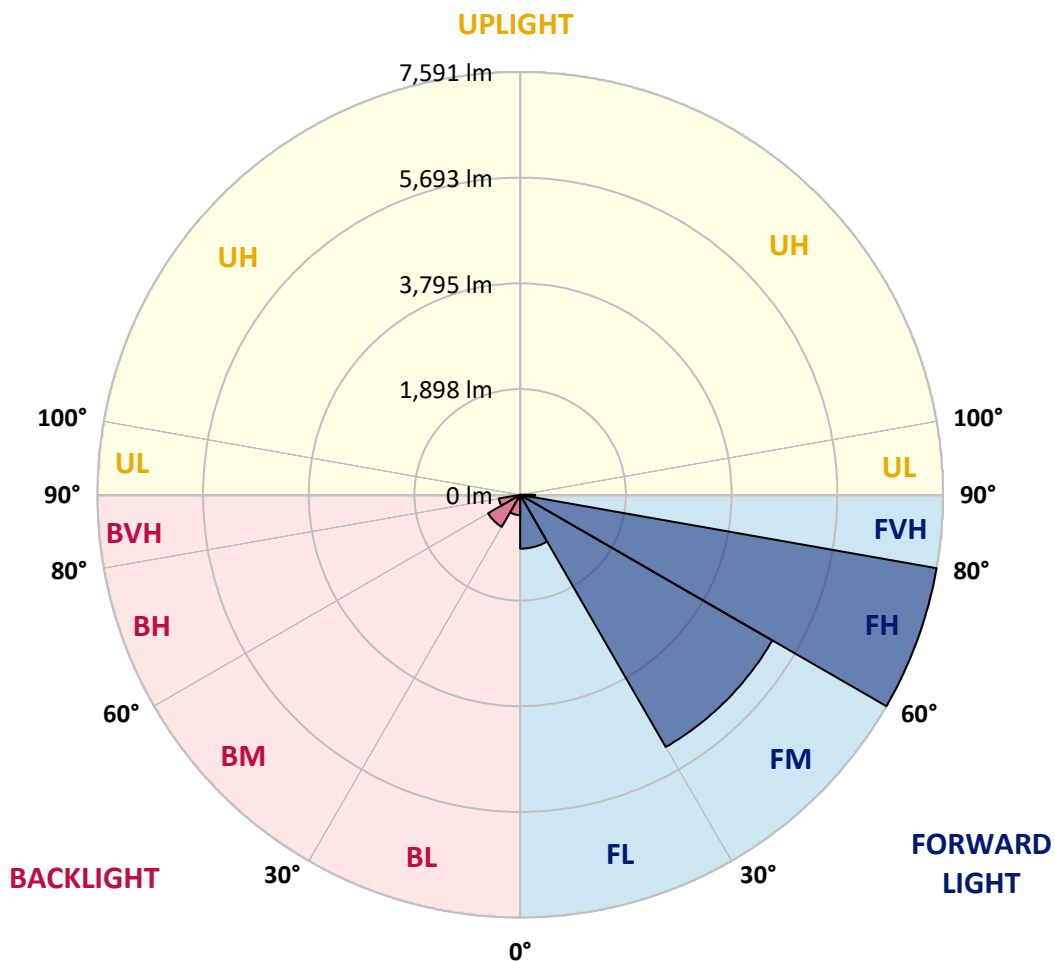
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	967.5	6.3			
FM	(30°-60°)	5226.6	33.8			
FH	(60°-80°)	7590.7	49.1			G4/12000
FVH	(80°-90°)	268.4	1.7			G3/500
BL	(0°-30°)	363.6	2.4	B1/500		
BM	(30°-60°)	663.0	4.3	B1/1000		
BH	(60°-80°)	387.5	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°	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4
2.5°	1797.1	1797.1	1793.4	1789.9	1771.5	1753.2	1749.6	1738.6	1705.7	1683.7	1661.7
5°	1947.2	1950.9	1943.5	1925.2	1885.0	1844.7	1841.1	1811.7	1749.6	1705.7	1658.1
7.5°	2090.0	2097.3	2078.9	2046.0	1998.4	1939.9	1936.2	1881.3	1800.8	1738.6	1669.0
10°	2210.7	2210.7	2185.1	2144.8	2093.6	2031.4	2024.1	1961.8	1870.4	1793.4	1702.0
12.5°	2342.5	2338.9	2302.3	2247.3	2188.8	2130.2	2126.5	2049.7	1961.8	1863.0	1749.6
15°	2463.3	2456.0	2408.3	2357.2	2294.9	2232.7	2229.0	2152.2	2060.6	1943.5	1819.1
17.5°	2529.1	2525.5	2481.6	2430.3	2379.1	2331.5	2327.8	2247.3	2148.5	2027.7	1888.7
20°	2540.2	2543.8	2507.3	2463.3	2434.0	2408.3	2408.3	2335.2	2229.0	2100.9	1961.8
22.5°	2543.8	2554.8	2529.1	2470.6	2463.3	2466.9	2474.3	2415.7	2305.9	2185.1	2038.7
25°	2569.4	2584.1	2565.8	2496.2	2488.9	2514.5	2521.9	2496.2	2397.4	2276.6	2126.5
27.5°	2620.7	2635.3	2620.7	2532.8	2521.9	2547.5	2554.8	2569.4	2496.2	2364.4	2218.1
30°	2723.2	2726.8	2693.8	2584.1	2562.1	2595.0	2606.1	2646.3	2587.8	2448.6	2305.9
32.5°	2902.5	2865.9	2767.1	2620.7	2602.4	2639.0	2650.0	2693.8	2671.9	2529.1	2397.4
35°	3268.5	3078.2	2851.3	2671.9	2653.6	2690.3	2704.9	2767.1	2778.0	2642.6	2510.8
37.5°	3264.8	3092.8	3048.9	2770.8	2745.1	2770.8	2789.1	2865.9	2909.8	2792.7	2675.5
40°	3495.4	3422.3	3422.3	2957.5	2873.3	2909.8	2928.1	3005.0	3081.8	2990.4	2869.6
42.5°	4220.2	4172.6	4121.4	3316.1	3052.6	3155.1	3166.0	3213.6	3305.2	3275.8	3133.1
45°	5029.0	4985.1	4787.5	3923.7	3360.0	3378.3	3404.0	3480.8	3612.6	3667.5	3499.1
47.5°	5662.2	5618.4	5450.0	4655.8	3839.5	3678.4	3678.4	3828.5	4033.5	4172.6	4011.5
50°	6171.1	6119.8	6017.3	5435.3	4626.4	4110.3	4088.4	4264.1	4567.9	4783.8	4674.1
52.5°	6665.1	6515.1	6452.9	6240.6	5515.9	4736.3	4677.6	4802.1	5223.1	5490.3	5398.7
55°	6994.5	6972.6	6906.8	6979.9	6449.2	5497.5	5446.3	5472.0	5999.0	6178.3	6064.9
57.5°	7302.0	7298.3	7444.7	7785.2	7466.7	6368.7	6288.2	6247.9	6749.3	6705.4	6804.3
60°	7682.7	7616.8	7957.2	8443.9	8400.1	7217.8	7126.3	7045.8	7324.0	7199.5	7690.0
62.5°	7701.0	7682.7	8374.4	9073.6	9326.0	8081.6	7975.4	7686.4	7825.4	7682.7	8535.5
65°	7001.9	7093.3	8550.1	9406.6	10102.0	8839.3	8711.1	8260.9	8272.0	8176.8	9531.0
67.5°	6844.5	6892.0	8067.0	9765.3	10662.0	9604.3	9483.5	8923.5	8791.6	8799.0	10120.4
70°	6452.9	6526.0	7466.7	9739.7	11104.9	10625.4	10504.7	9897.0	9578.6	9223.6	9666.5
72.5°	4930.2	5054.7	6291.8	8539.2	10984.1	11961.4	11928.4	11130.5	9893.4	8469.6	7313.0
75°	1669.0	1665.4	3305.2	5735.5	9867.8	12371.4	12437.2	10976.8	8630.6	5841.6	3630.9
77.5°	358.6	362.3	680.8	2324.2	6555.4	9933.7	10186.2	8279.3	5567.1	2602.4	830.8
80°	175.6	179.3	281.8	614.9	2620.7	5570.8	5966.1	4256.8	2057.1	519.8	139.1
82.5°	87.9	91.6	146.4	325.7	970.0	1980.1	2115.6	1566.5	589.3	292.8	69.6
85°	32.9	32.9	73.2	194.0	442.8	464.8	571.0	453.9	355.1	237.9	18.3
87.5°	7.4	7.4	40.3	95.1	197.6	146.4	146.4	139.1	215.9	161.0	7.4
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°	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4	1654.4
2.5°	1650.7	1636.1	1610.4	1584.9	1566.5	1544.6	1533.6	1522.7	1519.0	1515.3	1522.7
5°	1632.4	1610.4	1562.9	1522.7	1486.0	1456.8	1434.8	1412.8	1401.9	1394.5	1398.2
7.5°	1632.4	1599.5	1529.9	1467.7	1409.1	1346.9	1284.7	1237.2	1200.5	1178.5	1182.2
10°	1650.7	1606.9	1515.3	1431.1	1321.3	1189.6	1054.2	951.7	882.1	841.8	841.8
12.5°	1691.0	1632.4	1519.0	1387.2	1200.5	970.0	765.0	640.6	589.3	560.0	563.6
15°	1745.9	1676.3	1537.3	1328.6	1032.2	721.1	534.4	453.9	453.9	461.1	464.8
17.5°	1808.2	1731.2	1551.9	1240.8	816.2	516.1	420.9	413.6	424.6	442.8	442.8
20°	1870.4	1786.2	1559.2	1101.7	611.2	409.9	399.0	399.0	406.3	424.6	428.2
22.5°	1947.2	1855.7	1551.9	929.7	457.6	388.0	384.3	384.3	384.3	406.3	406.3
25°	2027.7	1936.2	1522.7	746.7	388.0	373.4	369.7	366.0	366.0	384.3	388.0
27.5°	2119.2	2020.4	1453.1	571.0	366.0	358.6	355.1	347.7	347.7	362.3	362.3
30°	2210.7	2115.6	1346.9	431.9	347.7	344.0	336.8	329.4	322.1	336.8	336.8
32.5°	2309.5	2214.4	1207.9	344.0	322.1	322.1	318.4	307.5	300.1	307.5	311.1
35°	2441.4	2327.8	1050.5	300.1	289.2	289.2	289.2	285.5	270.9	278.1	278.1
37.5°	2617.0	2485.3	867.5	278.1	263.5	256.2	256.2	256.2	245.2	248.9	248.9
40°	2840.3	2668.3	691.7	259.8	245.2	226.9	219.6	223.3	215.9	215.9	212.3
42.5°	3144.0	2865.9	519.8	245.2	230.6	205.0	190.4	186.7	179.3	175.6	175.6
45°	3579.6	3107.5	373.4	230.6	219.6	179.3	164.7	153.7	135.4	124.5	124.5
47.5°	4143.3	3382.0	278.1	215.9	208.6	157.4	139.1	117.1	91.6	84.2	84.2
50°	4831.4	3689.5	234.3	194.0	190.4	139.1	109.8	76.8	51.2	43.9	47.6
52.5°	5501.2	3978.6	208.6	172.1	168.4	120.8	80.5	40.3	22.0	22.0	22.0
55°	6064.9	4183.6	190.4	153.7	146.4	95.1	43.9	18.3	10.9	10.9	10.9
57.5°	6573.7	4300.7	172.1	135.4	117.1	65.9	18.3	7.4	7.4	3.7	3.7
60°	7038.5	4370.3	150.1	117.1	91.6	36.6	7.4	3.7	3.7	0.0	0.0
62.5°	7496.0	4421.5	128.1	95.1	69.6	14.6	3.7	3.7	0.0	0.0	0.0
65°	7843.7	4403.2	102.5	76.8	43.9	7.4	3.7	0.0	0.0	0.0	0.0
67.5°	7832.7	4154.3	76.8	58.5	22.0	3.7	0.0	0.0	0.0	0.0	0.0
70°	7005.6	3499.1	51.2	36.6	7.4	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	4970.5	2243.6	32.9	22.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2188.8	680.8	18.3	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	428.2	157.4	10.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	102.5	18.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.4	3.7	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)